THE TIMES
Higher Education
SUPPLEMENT

Wealthier areas still dominate the OU

by Sandra Hempel

A growing percentage of applicants for courses at the Open University are coming from the traditionally wealthier areas, such as the South and South East, while fewer applicants are from the North, the North West and the Midlands.

Figures for courses starting in 1979 show that 9.7 per cent of OU applications came from the South as opposed to 8.9 in 1977; 10.2 per cent came from East Anglia as opposed to 9.4 two years ago; and 8 per cent came from the South East as opposed to 7.7 in 1977.

In contrast the percentage of applicants from the West Midlands went down over the corresponding perio dfrom 8.3 per cent to 8.1 per cent; from Yorkshire from 6.6 per cent to 6.3 per cent; from the North from 5 per cent to 4.8 per cent; and from the North West by 0.9 per cent, from 11 per cent to 10.1 per cent.

The wealthier regions have traditionally been the source of a greater number of applicants in relation to their share of the United Kingdom population but this trend is now increasing.

At the same time the number of reapplications is going down. In 1977, out of a total of 45,291 applicants, 10,701 were reapplications, while in 1978, out of a total of 42,764 9,187 were reapplications. An OU spokesman said that one possible cause for the decline was that banks had been over the 20,000 mark for the past three years and the pool of reapplicants was thus drying up.

There was concern, however, about the low numbers applying for technology courses. For courses starting in 1977 arts applicants represented 34.65 per cent of total applicants; social science applicants, 28.68 per cent; maths, 10.75 per cent; science, 14.32 per cent; and technology, 11.6 per cent. For courses starting in 1979, the figures are: arts, 33.8 per cent; social science, 24.7 per cent; maths, 18 per cent; science, 16.3 per cent; and technology 10.1 per cent.

This was probably because technology was traditionally regarded as a heavily technical subject, said the spokesman.

"In fact the foundation course 'Man-made World' looks at technology in the broadest possible sense in terms of its effect on society", he said. "But this course has now been rewritten and the new course will start in 1980. We hope that more women, particularly, will be encouraged to apply."

Graduate numbers to rise by 1980

The number of university first degree graduates will rise from 55,800 in 1977 to 63,500 in 1980, excluding graduates in medicine, dentistry and veterinary science. The largest increases will be in the engineering and technology group, followed by agriculture and social, administration and business studies. The number of CNAA graduates will rise from 14,700 to 18,800 over the three years.

These findings are contained in a report published this week by the Association of Graduate Careers Advisory Services.

The report looks in detail at the output of university graduates in engineering, science and the social sciences. It predicts that the decline in numbers experienced in the early 1970s will be reversed from 1978-1980 but that the increase will be fairly small. The total number of first degree engineers from universities will rise from 8,050 in 1977 to 9,870 in 1980.

The number of scientists will also increase, but again by a modest amount. Law will continue to provide the largest number of graduates in any single discipline in the social sciences group, although there will be increases in graduates in business management, geography and economics.

Looking at the graduate supply beyond 1980, the report predicts a fall in the late 1980s and points to sombre employment prospects for young people generally over the next few years. Graduates will need to be adaptable in the career options they are prepared to consider and will have to be accepted by a wider range of employers.

Geoffrey Prior-Wandesford, of the Occupational Advisory Service at Sussex University and chairman of the sub-committee of AGCAS which produced the report, said that one of the most significant findings was that a large proportion of graduates were unable for employment in 1978. About 30 per cent of engineering scientists were foreign students returning home or British graduates taking further academic or professional courses.

"The survey has revealed a definitive lack of information about non-university sector, even within DES", said Mr Prior-Wandesford.

The other findings contained in the report, he said, but it should provide some useful information for careers advisers many of whom know very little about the graduate labour market.

The Graduate Labour Market in the 1980s. Association of Graduate Careers Advisory Services.



Rings from an exhibition of finger rings from Ancient Egypt to the present day at the Ashmolean Museum, Oxford, from tomorrow until September 17.

Oakes thrown into the melting pot

continued from page one

reiterating its request for a review of training and education for the age group. The meeting that unless there was such a review the association would oppose the introduction of mandatory R...

Councillor Alistair Lawson, vice-chairman of the ACC education committee and seconder of the motion to oppose the EMA proposals denied this week that he had been influenced by pressure from the Conservative Party headquarters.

Although CLEA has already begun negotiations with the DES over the new scheme, Councillor Lawson said the ACC had looked at the proposals in detail and was afraid of their consequences. In the case of the EMA proposals he suggested that the DES might have gone along with the further than was prudent.

Teesside warned by CNAA

continued from page one

be the most critical of any polytechnic since that written about Polytechnic of North London in 1973.

Dr Edwin Kerr, chief officer of the CNAA, said this week: "We do not have a constitutional role to specify the type of management which an institution should have. What we can do is to comment on the type of management that is being used and the effect it may have on the academic work that the council will approve."

He said he could not comment in detail on the report until the polytechnic and the local authority had time to study it.

A spokesman for the polytechnic said the report was being studied by the polytechnic and urgently studied by the Cleveland education authority. "No further comment can be made at this time."

NEXT WEEK

One man's dream of an ideal university

Scholarship in the Common Market

Archaeology in Northumbria

Ann Oakley reviews five books about women

Progress of the credit transfer scheme

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DipHE students thrive on transfer to degree courses

by John O'Leary

The first year of widespread awards to students transferring to degree courses from the Diploma of Higher Education has produced a crop of good results. A small number graduated last year but the latest results will produce the first reliable indication of standards among those who have transferred.

Students have graduated with honours from a number of institutions, giving encouragement to those attempting to extend the current system of transfers. Some 50 students went on to non-linked degree courses this year after completing DipHE programmes and more are expected in future.

At North East London Polytechnic, where 12 students completed a degree course last year after transferring, this year's candidates were all awarded honours and former students have also gained higher awards at Oxford Polytechnic and Aberdeen University. Among NELP's awards was the first example of a first class honours degree by independent study. Mrs Josie Tewell, who joined the DipHE course in 1975 as a mature student, transferred to the BA course after two years, specializing in psychotherapy.

City Polytechnic also awarded honours degrees to its first transferred diplomates. All five students on the course took the Dip HE at other institutions and took degrees in a variety of subjects.

Opportunities for transfer have now increased considerably with arrangements between a number of institutions. One new example is an arrangement for students taking a Dip HE in social and environmental problems, at King Alfred's College, Winchester, to go directly into the final year of Plymouth Polytechnic's BSc in environmental sciences.

The first students attempting to transfer to non-linked courses sometimes had to join the first year of a degree course and the Plymouth arrangement is thought to be the first to admit students at such an advanced stage.

However, supporters of the DipHE are now anxious to switch the emphasis from transferring students to degree courses to developing the award in its own right. A campaign has been launched by the Association of Colleges Implementing DipHE Programmes to establish the credibility of the qualification with employers.

A working party has also been set up to investigate alternative education programmes which could establish the diploma as a course pioneering new approaches to higher education. The group, under the chairmanship of Mr Martin Brennan, of King Alfred's College, Winchester, is expected to present its report early in 1979.

Delegates at the ACID summer conference reaffirmed their support for the original conception of the DipHE, as outlined in the James report, as a course of a different nature to a degree, broadened in scope to provide a more satisfying educational experience and offering vocational choice.

BASW pact at Aberdeen

by Judith Judd

The British Association of Social Workers has called off its dispute with Aberdeen University about the appointment of an unqualified social worker to a social work chair but will persist in its fight with the London School of Economics.

The decision was taken this week after the association had received assurances from Professor Gerard Rochford who was recently appointed to the Aberdeen chair of social work.

Professor Rochford said in a letter to *Social Work Today* that the direct responsibility for the training of social workers at Aberdeen was already undertaken by experienced and qualified staff.

He added that the task of defining the curriculum was a shared departmental enterprise. He hoped to remedy criticisms of his lack of experience in the field by arranging a work replacement for himself in a social work team under a qualified supervisor.

Professor Rochford, who took up his position on Tuesday, said his own task would be to see that planning took place, and not, to dictate the outcome, still less to undertake jobs which were beyond his competence.

Mr John Cypher, assistant general secretary of BASW, said: "We have been impressed by the university's willingness to negotiate on some of the consequences of the appointment. We shall continue to monitor developments in social work at Aberdeen."

The association call for a boycott on the supervision of new students doing field work remains in force for the LSE which has just appointed Professor Robert Pinker to its first chair of social work.

The association has asked for talks with Professor Ralf Dahrendorf, the school's director. Professor Dahrendorf said in a letter that he was sorry the association was taking such a stand and was sure that it would not wish to damage social work education at the LSE.

Rules relaxed for youth jobs

by Patricia Santinelli

Radical relaxation of the six week unemployment and "closed season" rules governing eligibility to the £800m Youth Opportunities Programme was announced this week by the Manpower Services Commission in its detailed year plan up to March 1979.

The commission has granted careers and employment officers discretionary powers to admit young people before September 1, provided these people are unlikely to benefit from a return to full-time education and would have otherwise remained unemployed.

In addition disabled young people who have left school this summer and are unable to find a job will be able to join the programme immediately without waiting until the end of the "closed season" on September 1.

This ruling will also apply in areas where there are no youngsters unemployed for six weeks to disabled young people, those in care or discharged from borstal or detention centres and those referred to the programme by specialist workers and careers officers.

The MSC recently granted exemption from both the six-week and "closed season" rules to Merseyside, Durham and Cleveland as well as Ellesmere Port and Widnes, all areas of high unemployment.

The commission is concerned that although it is up to target and it has received well over 100 applications for training workshops providing 7,000 to 8,000 places, work experience projects and community service schemes have made a relatively slow start, and sponsors are urgently required.

This is seen as particularly worrying in the light of the MSC area boards plans, which indicate that by March, 1979, nearly 15,000 places will be available on work experience projects, some 12,000 places on community service placements and nearly 12,000 on short industrial courses.

British-Soviet row in Havana

continued from page one

Union Jack and the national anthem. Some delegates felt that the Union Jack ought to be paraded with the other national flags, and the anthem played alongside other national anthems. Others felt that the national emblems of a bourgeois state whose government had contributed not a penny to the festival would be inappropriate.

By the time of the ceremony a compromise had been struck. The British would march in silence holding aloft the special festival symbol, with a Union Jack etched faintly into the background. In the event, the complicated negotiations proved irrelevant, as the Cuban organizers thrust a Union Jack into the hands of the British delegates, assuming perhaps naively that despite its political eccentricities the British delegation would want to march under the British flag.

Rift in the ranks, page 8

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Universities part-time 'failure' attacked

by Judith Judd

Universities are failing miserably in their duty to part-time students, despite the growing demand for recurrent education. Dr Keith Hampson, a Conservative education spokesman, made this charge this week after figures of part-time students in individual universities were given by the Government.

The 3,812 part-time university students doing first degrees in 1976-77 represented only 1.67 per cent of the total university undergraduate population, and 15 universities had no such part-timers.

Dr Hampson said it was deplorable that big urban universities such as Leeds and Liverpool should have only six and 34 part-time first degree students respectively. Aberdeen, Heriot-Watt, East Anglia, Sussex and Warwick each have one such student and City has three. In the polytechnics, he said, the picture was better.

In 1977 there were 5,658 part-time students on BA and BSc courses in the polytechnics, about 4.83 per cent of their total number of full-time and sandwich students, an increase over the previous year of 21 per cent. In universities growth has been much slower. In 1974-75 there was a total of 3,097 part-time undergraduates in universities.

Professor Robert Sneale, chairman of the Universities' Council for Adult Education, said that British universities had not adapted themselves to the potentialities of part-time students. "In British society I don't think we have thought about students of this sort. Part-time education is something we have for 16 and 17-year-olds. We have to have more of it from 18 upwards."

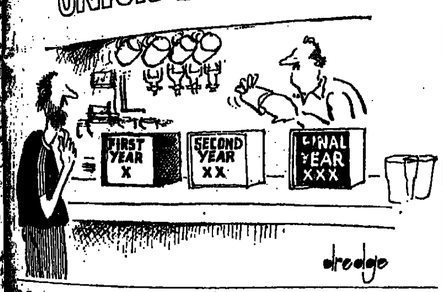
However, he said the council would prefer to see a big increase in full-time mature students rather than a big growth in numbers of part-time students. He thought universities would be prepared to adapt their courses to suit part-time students if they felt confident that there was a market for them.

Mr John Akker, deputy general secretary of the Association of University Teachers, said the figures were not surprising. The Open University, with 55,000 students, and Birkbeck College, London, absorbed most of the part-timers. The small numbers reflected the number of applications. "If industry and Government were prepared to offer more paid educational leave and grants then universities would have more part-time students."

Though there were few part-timers doing first degree courses many more were doing short, vocational and diploma courses. In 1975-76 there were 165,000 part-time students in extra-mural departments.

Universities feel that they have had to work so hard to expand their full-time undergraduate numbers in recent years that they have had no time to improve the proportion of part-time students.

	Number	as % of full-time & sandwich undergraduates
Aston	6	0.14
Birmingham	148	2.23
Bradford	78	2.10
Bristol	112	1.04
City	3	0.14
Durham	12	0.31
East Anglia	1	0.03
Essex	17	0.85
Exeter	29	1.56
Hull	52	1.31
Leeds	6	0.08
Liverpool	34	0.54
London	1,740	6.49
Manchester	60	0.58
Newcastle	79	1.68
Nottingham	34	0.66
Reading	19	0.44
Sheffield	137	2.24
Southampton	7	0.15
Surrey	26	0.82
Sussex	1	0.03
Warwick	1	0.03
University of Wales	165	1.13
Aberdeen	1	0.02
Dundee	17	0.67
Edinburgh	125	1.66
Glasgow	514	5.95
Heriot-Watt	13	0.59
St. Andrews	1	0.03
Strathclyde	50	0.98
Queen's, Belfast	274	5.39
Ulster, Coleraine	13	0.81
UK Total	3,812	1.67
Open University	5,116	



No space for UK astronauts

Britain's chances of getting an astronaut on board a future space flight received another setback. America's National Aeronautics and Space Administration has just turned down the two United Kingdom candidates for the Spacelab 2 mission.

Dr Keith Strong, of University College London's Mullard space laboratory, and Bruce Patchett, of the Science Research Council's Appleton laboratory, had been on a short list of eight candidates. But NASA has told them that they have not been included in the final four who will make up the crew and back-up crew.

Mr Patchett and Dr Strong had cooperated on the only European experiment selected for the mission — a British instrument package designed to detect the amount of helium in the Sun—and had hoped that at least one of them would be selected to help operate it.

But NASA has selected only United States scientists for the mission—which is scheduled for launching in April, 1981, although delayed by at least a year. Mr Patchett said these researchers had greater experience in working for space missions and being older men would have little chance in future of being selected.

"Naturally we are disappointed that I don't think there was any particular political manoeuvring involved. There is every chance that we might be picked again if another of our experiments is chosen for a launch", he added.

New computer board head

The next chairman of the computer board for universities and research councils is to be Professor Robert Churchhouse, the Department of Education and Science has announced.

Professor Churchhouse is professor of computing mathematics, University College, Cardiff.

Nigerian students accused of squandering grants

More than 100 Nigerian students have been accused of frittering away their grants on luxury goods and producing bogus degree certificates to justify their existence in Britain. They are now said to be "squatting" in London after having their funds cut off.

The claims were made by Professor Tam David-West, a senior Nigerian education commissioner, who said inquiries had revealed that many students were using Government grants to buy colour television sets, stereo systems and other expensive items. Investigations have now spread to Europe and North America.

Professor David-West, who was on a short visit to London, said a number of students receiving scholarships were wasting time and money, while thousands were waiting in Nigeria anxious to take up places. "I have evidence of some professional students who have been overseas for more than eight years and don't have a single certificate to show for it," he said. Now we have stopped their parasitic life they are squatting in London."

Controversy has surrounded the Nigerian student population in Britain since many claimed not to be receiving promised grants and began to fall behind with tuition fees. Dr Owen, the Foreign Secretary, had to intervene after 68 students at Plymouth Polytechnic were unable to pay fees last September.

Now some institutions are demanding payment in advance and there are fears that some may have to drop out. In 1976-7 there were more than 6,000 Nigerians studying in Britain—the third largest contingent from an overseas country.

Despite claims from the National Union of Students that delays of up to three years in the payment of grants had left some students penniless, Professor David-West denied that any Nigerian student was facing financial hardship. About 200 grants had been withdrawn, he said, but satisfactory academic progress had been lacking.

The professor's comments enraged Nigerian students in London and brought a sharp retort from NUS, which said the major problem was a non-payment of grants to students who had produced adequate results. The Nigerian government was abusing the goodwill of institutions in Britain, a spokesman said.

The United Kingdom Council for Overseas Student Affairs also said its experience did not bear out Professor David West's claims.

The professor said any grant unfairly withdrawn would be reinstated.

Non-Commonwealth students pour in

by John O'Leary

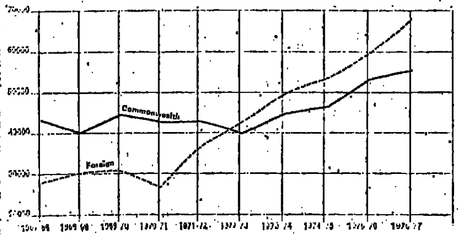
The number of overseas students in Britain rose by more than 10,000 last year, largely because of a sharp increase in the intake from non-Commonwealth countries, according to statistics published by the British Council.

While acknowledging that precise figures are difficult to obtain, the council's report estimates that almost 125,000 people from overseas were studying in Britain during 1976-77, the sixth successive year in which numbers had increased.

At the start of the decade there were considerably more students coming to Britain from inside the Commonwealth than outside, but roles have now been reversed. While Commonwealth numbers have risen by some 12,000, other countries now send about 32,000 more students than in 1971-72.

However, the grand totals disguise conflicting trends both in the different sectors of higher and further education, and in a breakdown of countries. Among the estimated total of 97,627 students from developing countries, for example, 55 per cent were from the Commonwealth and only 45 per cent from outside.

The trend is also reversed in the maintained sector, where Commonwealth students continue to predominate. In polytechnics and other institutions outside the universities 27,000 overseas students came from the Commonwealth and 20,000 from elsewhere.



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Responses to 'Higher education into the 1990s'

Importance of research underlined

by Maggie Richards

Expansion of continuing education opportunities in the 1990s will depend upon adequate funding and recognition of the important place of research in the university system. That is the view expressed in Sheffield University's response to the Department of Education and Science consultative document.

It will also be vital, over the next 15 years, to appoint more young members of staff in order to achieve a balanced academic age range by the end of the century, the university believes.

Giving support to the philosophy of continuing education outlined in Model E of the document, the reply points out that additional resources will be required to finance the new type of students.

But concern is expressed about the document's preoccupation with student numbers, without taking into account the research functions of universities.

"The universities' present high efficiency results from a very close integration of teaching and research. While the teaching function is generally understood, there seems to be a failure in some quarters to understand that the high quality of teaching is necessarily related to the research which has the inter-linked functions of serving the community at large and in terms of its quantity as well as quality, is of vital importance to the nation", says the response.

Universities, as "generators of learning", can only maintain the quality of education they provide by retaining a strong blend of research, it adds.

The response envisages considerable growth in the area of post-experience and in-service training courses. But it points out that professional bodies require a high level of education, so that universities must continue to select students of high ability for first degree courses.

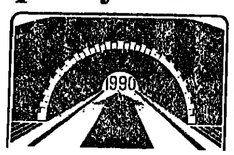
"Mid ability teaching could be disastrous for the general standard of graduates. It would inevitably lead to the rise of graduate schools, as in the USA", the reply says.

On staffing the university warns that a slow staff turnover rate could cause problems in the 1990s, with large numbers of senior staff retiring, to be replaced suddenly by young inexperienced staff.

"There are already some science-based departments which have had no new staff for 10 years and, because of the swing away from science in schools, are unlikely to be able on student numbers to justify the appointment of new staff for at least another five years."

Dealing specifically with Sheffield, the response says the university would want to play its part in the changing pattern of higher education.

Nalgo wants national policy control body



by Judith Judd

A national body including trade unionists should be set up to oversee policy in universities, according to the National and Local Government Officers Association.

In its response to the discussion document Nalgo, which represents non-teaching staff in universities and colleges, says that if the pool of entrants to higher education is widened universities will have to be much more accountable to the public.

The association believes that without radical changes in accountability, expansion of the kind discussed in the document will not be possible. "It is vital to both the needs of education in the future to more closely reflect the needs of the community at large, and in terms of industrial democracy that the accountability of universities be examined.

It proposes that a national body with representatives of all sections of the community including the trade union movement should be set up and through performance given authority for national policy in universities (including general oversight of their administration.

The association says that the challenge to the absolute autonomy in universities in no way threatens their academic freedom but recognizes that in the 1990s education will have to expand in a much more flexible and planned way.

It was a reflection of the traditional narrow approach to education that despite the fact that the 67,000 non-teaching staff account for the vast majority of employees in universities, the document does not analyse the role they would have to play in the various models.

Nalgo strongly favours model E, which would extend higher education to more mature and working-class students, but believes it should be introduced as soon as possible and not be postponed for 12 years.

It notes how quickly the 1972 White Paper *Education, a Framework for Expansion*, became dated and suggests that the demographic assumptions on which the new document is based are already out of date.

A chance to reaffirm faith

by Ngaio Crequer

The discussion paper "gives universities an opportunity to re-affirm their faith in the value of higher education to the community at large, according to the response by the University College of Wales, Aberystwyth.

It will also give universities the chance to emphasize their crucial role in teaching at an advanced level and in research, but Aberystwyth says the Department of Education and Science fails to give adequate recognition to this role.

It says that a period of declining numbers gives an opportunity to improve the quality of teaching and research and thereby to maintain the supply of graduates with the highest quality.

It believes that the British university system already works at a high degree of efficiency and that Britain must continue to adhere to the Robbins principle that higher education should be available for all those qualified by ability and attainment to pursue it.

Aberystwyth favours a combination of Model C, which provides for a projected peak in student numbers in the early 1980s by means of temporary staff and rented accommodation with some reduction in staffing standards, and Model E.

Industry link on staffing sought

by Robert McKie
Science Correspondent

A joint academic-industrial appointments scheme for new staff has been proposed by the committee of heads of university chemistry departments. In a reply to the discussion document the committee states it is opposed to the use of temporary staff to overcome problems caused by the peak in student numbers expected in the 1980s.

But the department heads warn that there is a lack of young recruits at present which could cause a grave problem for the future of chemistry because of the lack of infusion of new ideas and expertise.

"We urge that new staff be recruited immediately even though this may not be justifiable at present in terms of the staff-student ratio", the committee adds. "Any medium-to-large department needs at least one new member every two or three years to maintain age balance, to invigorate the research effort, and to produce graduates with a full range of chemistry background."

In an attempt to boost recruitment, the department heads propose a scheme of joint appointments with industry. Those appointed would spend time in both the academic and industrial sectors depending on individual requirements which may change over the years.

But they reject the idea of four-term academic years being introduced to reduce higher education costs per student. Such a move would emasculate university chemistry research and would have grave consequences for the future of the United Kingdom chemical industry and for British chemistry generally.

They also reject the idea of introducing shorter full-term courses as a method of coping with the projected student increase. Indeed, should the present N and F level examination proposals be introduced to give broader pupil education, the resulting "diminution of factual knowledge" in university entrants will render irresistible the call for a four-year honours chemistry course for some students, the heads believe.

However, the committee is optimistic that university chemistry departments could cope with the hump in student numbers in the 1980s. At present facilities are underutilised and the question of subsequent disposal of buildings is therefore largely inapplicable to chemistry.

In its reply to the document, the Institution of Geologists proposes a new two-tier degree structure



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Flexible approach to teach entry standards broken

Minimum standards in English and mathematics have been laid down for teacher training entrants of the 1980s, despite calls for a more flexible approach. Guidelines issued by the Department of Education and Science also confirm that next year's intake will be the last for non-graduate Certificate in Education courses.

Candidates who would expect to enter teaching after the academic year 1983-84 will, with certain exceptions, need passes of at least Grade C in O level or Grade 1 CSE in English and mathematics to qualify for BEd or postgraduate courses. The new requirements will therefore take effect in 1980 for intending BEd students and in 1981 for those starting a postgraduate certificate course.

Training institutions have been given until August 31, 1979, to submit alternative arrangements to test those students not able to offer these or equivalent qualifications. But the DES circular makes it clear that those allowed to sit such tests should normally be restricted to mature students, teachers wishing to transfer from further education or those joining the few remaining non-graduate courses.

Under no circumstances should this option provide an easier route into the profession and [illegible] be available to [illegible] who had [illegible] opportunities to obtain the [illegible] qualifications after the [illegible] circular. Those who [illegible] CSE examinations and do [illegible] the necessary grades are [illegible] ally excluded.

There is concern in [illegible] of colleges that the early [illegible] tion of such standards, [illegible] with the move towards [illegible] graduate profession and [illegible] job opportunities, will [illegible] ment to teacher education [illegible] particularly difficult in [illegible] Exemption has been [illegible] certain subjects, such as [illegible] a high proportion of [illegible] usually lack the required [illegible] tions, but it was decided [illegible] a system would be difficult [illegible] nister and inappropriate [illegible] courses.

Proposals that students [illegible] be allowed to reach [illegible] standards during their [illegible] also rejected.

The only non-graduate [illegible] courses to recruit after [illegible] be one-year courses for [illegible] specialist qualifications [illegible] business studies and [illegible] and technology. These will [illegible] until 1983-84 to safeguard [illegible] supply of shortage subjects

Government's student union finance proposals attacked

Criticism of the Government's proposals for a new system of financing student unions is mounting. Public accountants are unhappy with the new scheme, while a second university and a teachers' union have voiced their opposition, proposing entirely new arrangements.

With the National Union of Students already advocating a year's delay in the introduction of the changes, an early agreed settlement would appear unlikely. The three latest submissions all find different objections to the two-part system proposed by the Department of Education and Science.

The most influential of the three may be that from the Chartered Institute of Public Finance and Accountancy, which will complete its report next week. It is expected to be critical of the DES scheme, particularly on the question of public accountability, one of the major objectives of the revision of the current system.

Southampton University, on the other hand, while believing the present arrangements in universities to be sufficiently accountable already, would prefer an index linked system to the one proposed. It follows Strathclyde in presenting united opposition from the university authorities and the students' union, which has plans to rally support for its stand among other university unions.

The submission recognizes that "strongly held, if misguided" objections to the present procedure make some change desirable, but criticizes the DES proposals for being "cumbersome, lamentably expensive of public funds and deeply divisive". In its place, the university suggests a modification of the present arrangements to ensure that union subscriptions over a [illegible] year period should not [illegible] greater rate than the [illegible] or Retail Price Index.

Union subscriptions [illegible] could form a base line for [illegible] system and a new base [illegible] to be negotiated with the [illegible] sity Grants Committee if [illegible] tional increase in funding [illegible] thought to warrant a [illegible] count in excess of that [illegible] the index. The university [illegible] that the system could [illegible] to the public sector [illegible] although it sees no reason [illegible] common scheme should [illegible] both.

The Association of [illegible] Teachers, in its critique of the [illegible] cing proposals, favours the [illegible] of membership fees above a [illegible] level by the students themselves. The institution would meet [illegible] expenses from its own income, the DES suggests.

Membership would continue [illegible] compulsory but the students would set the extra fees themselves, possibly by a two-thirds majority, to cover additional expenditure. But the APT believes, would encourage students to take responsibility for their union and would remove the need for any controls or [illegible] spending other than the [illegible] criteria of independent audit.

Comments by APT are reserved [illegible] to the universities and polytechnics as the institutions recognized by the DES as providing mainly for a full-time or sandwich course of study away from home. For these, the association believes, the present system is unsatisfactory because it denies to the student body as a whole the responsibility for [illegible] and allocating fees, and does not protect the minority of students who do not receive grants.

One in seven take A levels

More than 117,000 pupils left school in 1976-77 with one or more A levels, nearly 30,000 more than in 1966-67, according to provisional statistics issued by the Department of Education and Science. The majority, 93,000, gained two or more passes, compared with 70,000 a decade ago.

Of the 752,000 school leavers in 1976-77, 107,000 attempted no examinations, 234,000 attempted C.S.E. only, 277,000 attempted O levels and 134,000 attempted A levels. A total of 53,000 went on to take degree courses. In 1966-67 there were 505,000 school leavers.

The figures show a swing towards mixed A level combinations. In 1969-70 and 1976-77 about 30 per cent of those gaining two A levels had passed in mathematics; 11 per cent in 1976-77 had passed in mathematics and a non-science subject, compared with 7 per cent in 1969-70.

Teaching the young how to learn

How to learn most efficiently is the objective of the latest study commissioned by the Further Education Curriculum Review Unit and described in its first annual report.

The study, which will not be completed until late 1980, is being undertaken by the Industrial Training Research Unit. It will examine young people to recognise different ways of learning and to realise [illegible] while some tasks can be adapted to a preferred learning style, others may require a different approach.

Two other recently commissioned studies which are to some extent complementary are a review of [illegible] major styles of curriculum design [illegible] further education and a survey [illegible] disseminating curriculum [illegible] tion in further education.

The first is being undertaken [illegible] Coombe Lodge Further Education Staff College and the second [illegible] Blackpool College of Technology.

Geordies move into microelectronics

by Robin McKie
Science Correspondent

A microelectronics research institute has been set up in a unique collaborative exercise between Newcastle University, Newcastle Polytechnic and the firm, Computer Analysts and Programmers (UK), in which the National Enterprise Board has a minority shareholding.

The project is to be backed by Tyne and Wear County Council, which is giving a total of £300,000 over the next three years. A similar sum is expected to be raised from groups such as the Science Research Council, the Department of Industry and various electronics companies.

One of the institute's trustees, Professor Hugh Jones, head of the polytechnic's department of electrical engineering, is to travel to "Silicon Valley", the centre of America's microelectronics enterprise in California next month, in a bid to recruit expert staff. A total of 18 researchers will be employed when the institute is fully operational in about three months. First results are expected in a further three months.

The research establishment will carry out work into the potential applications of silicon chips and microelectronic hardware. This is expected to boost local industry. The council is also hoping that setting up the new institute will persuade the Government to establish in the county the factory of the National Enterprise Board's projected silicon chip company, Inmos.

The institute is expected to be self-sufficient within three years and those investing in the enterprise are also to get some return from the patent rights of any developments.

The three participants will all supply back-up services. Software will be handled by CAP and the university, and the hardware will be provided by the polytechnic where a total of about £74,000 is about to be spent on buying new equipment.

Dr Cyril Lipman, vice-chairman of Newcastle Polytechnic, said setting up the research establishment represented a unique cooperative venture between a British university and polytechnic. "The project developed completely", he added. "Each side complemented the other. Negotiations went through with such alacrity it was a pleasure to be associated with the venture."

It was the first occasion in the country where a university and a polytechnic had cooperated at the most advanced level of intellectual thinking and disciplines. "The spin-off will be to show the country that we have the highest intellectual capacity in this field and we will also have the capacity in equipment."

Government grants reprieve to *British* Council

by Judith Judd

The British Council should not be abolished but some of its offices should be merged with diplomatic missions, the Government says in response to a report from its "think tank", the Central Policy Review Staff.

In a White Paper published last week, the Government says: "The British Council is one of the instruments through which Britain's longer-term national interests are, and will continue to be promoted."

"The Government do not accept the CPRS recommendation for the abolition of the Council. But they consider that closer coordination is required with the Foreign and Commonwealth Office, and also with the Ministry of Overseas Development and the Education Departments."

The paper says that a country-by-country examination of how far council offices abroad could be *merged with* missions is already under way, though the desirability of this will vary from country to country.

"In some a separate British Council office has easier access to schools and colleges than a diplomatic mission would have.

"In others it has been useful at times to be able to maintain a separate British Council presence in countries where diplomatic relations have in the past been broken off."

A management review, proposed by the council itself, is to be started. In the meantime, ministers will say what they believe the council's role should be.

The paper says that the value of educational and cultural work cannot be quantified but the Government thinks it helps relations with other countries and stimulates the use of the English language. France and Germany spend more than Britain in this field.

The British Council said this week that it accepted the need for close cooperation with Government departments and that this was already a matter of day-to-day consultation.

It also accepted the need for rationalization of educational activities and would examine the possibility of merging council offices abroad with missions particularly with regard to administrative arrangements.

In some places, however, it believed it was important for the council to have a separate physical identity. A spokesman pointed out that many of the points made by the Government were part of the council's continuing policy.

Retirement at 50 nearer

Plans for an early retirement scheme for university lecturers are almost complete and the Department of Education and Science is considering amendments made to their draft guidelines.

The Association of University Teachers and the Committees of Vice Chancellors and Principals have commented on the DES guidelines. Broadly the scheme would mean an enhanced pension and lump sum to which the member retiring early would be entitled, without actuarial reduction, based on his or her years of service. The enhancement would be achieved by adding notional years of service up to a maximum of 10 years.

Early retirement, after 50, would be voluntary. But it has been made clear that there will be no extra money available for universities to pay for the scheme. It will have to be self-financing.

The DES is expected to put forward a detailed scheme at either the end of September or the beginning of October. Proposals would then be sent to individual universities and AUT branches. The association would hope to put it before its council meeting in December.

Accountancy students promote debate on training levels

by Patricia Santinelli

A major public debate on the level of education and training to be attained by newly qualified chartered accountants is to be staged by the Association of Chartered Accountants Students Societies at the University of Sheffield next month.

ACASS is seriously concerned about the lack of definition behind the current structure of education and training policy which, it says, was initiated by the Institute of Chartered Accountants without its aims being made clear to either members or students.

The student body has for some months been arguing with the ICA over last December's poor final examination results—only 629 out of 3,034 candidates passed—which it blames on the lack of an adequate education and training policy to support the institute's high examination standards.

Following a meeting with members of the profession ACASS has now decided that the adoption of a definition is vitally important to the development of any policy. Once it has been agreed it will be submitted to the institute for approval.

"Only then will we be able to validate each part of that policy, especially each subject suggested for study, by explaining how it contributes towards the stated objectives", ACASS said. "In this way we will be able to recommend a length and breadth of education and training based on objective reasoning."

The proposed definition for debate is based on an earlier ACASS paper "Education—the Problem Posed". Among its eight objectives is the need for a qualified accountant to understand the purposes of different accounting practices.

Another requirement is that the accountant should have a sufficiently broad understanding of accounting matters to enable the swift adoption, after qualification, of spheres of accountancy work other than the one in which he was trained.

The final stage of this process is to design a feasible structure, taking into account the restraints of both public and private education systems and the type of work available.

GP training given independent boost

An independent body which will help in the training and education of general practitioners was launched recently. The MSD) Foundation, supported by the pharmaceutical company Merck Sharp and Dohme, aims to devise learning programmes for doctors during their three-year period of training as practitioners.

Professor P. S. Byrne, chairman of the foundation's steering committee, said the new body would also provide valuable services for doctors involved in training by creating specially designed material for their needs.

"No one before has attempted to create such a comprehensive range of training material and it will take some years before all programmes become generally available", he added.

Much of the foundation's work will be in carrying out research into the need for educational programmes to complement GP training and to evaluate its effective use. To help in this an advisory council will be appointed, representing most of the bodies involved in postgraduate medicine in Britain and Europe.



Mr Robert Lewis and Mr Stephen Scott working on a 268 ft. pendulum which the Open University is hanging from the dome of St Paul's Cathedral in a reconstruction of the Foucault experiment showing that the Earth rotates. The experiment is part of the first television programme of the new science foundation courses.

BL included in national review

A major review of libraries which will include a reassessment of their aims and purposes is to be carried out by the Library Advisory Council for England.

The study will include the British Library, university and other educational libraries and those run by local authorities and other public or private institutions. The aim is to reconsider libraries' social and professional objectives and inquire into technological developments, economic factors, management, buildings and staffing requirements.

Yes and no on Scots student vote

by John O'Leary

Students in Scotland fear that electoral regulations designed to ensure their right to vote may prevent them from influencing the result of the promised referendum on devolution in favour of a Scottish assembly.

Although the law allows a person to vote only once, students are often registered both in their home constituency and at their place of study. Because the "yes" vote must comprise 40 per cent of the electorate to be recognized, the referendum will break with British electoral tradition in attaching importance to unused votes.

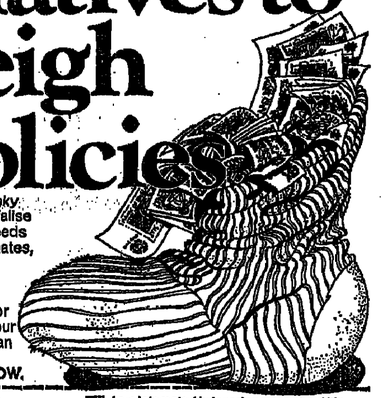
A student at Edinburgh University, for example, might vote "yes" in the capital but would still swell the ranks of the non-voters in his or her home town. Any registered voter who does not turn out will aid the anti-devolution lobby, which only needs to prevent its opponents from reaching the 40 per cent mark to block the measure.

The National Union of Students has written to Mr Millan, Secretary of State for Scotland, complaining that many of its members will cancel out their own votes in support of devolution, while those in opposition will have a double effect. A reply from the Scottish Office recognizes that there are anomalies but makes no commitment to satisfy the students' grievance. Mr Millan has the power to make some alterations to the referendum arrangements.

NUS has adopted a policy in support of devolution and strongly opposed to the unprecedented requirement that a fixed proportion of electors must vote. It calculates that students account for almost 1 per cent of the potential poll and that its members' unused votes could therefore be crucial.

Ironically, English students could have a more "positive" effect on the outcome of the referendum than many of their Scottish colleagues because their second registration will be in constituencies which are not voting. But NUS sees possible complications even here because it believes students from outside Scotland may feel obliged not to take part in the referendum even if they are sympathetic to devolution.

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11/8/78

RESEARCH

Refugee study criticises Britain and Canada

by John O'Leary

Britain and Canada are critized in a new study into the Ugandan Asian crisis of 1972. Three academics have been investigating the plight of the refugees for five years and they claim that both governments issued misleading statements about the situation.

Canada is accused of acting through self-interest by closely selecting its 6,500 refugees while professing that it was motivated entirely by humanitarian feelings. Mr Cecil Perlora, of Winnipeg University, and Mr Bert Adams, of Wisconsin University, examined the characteristics of those entering Canada and found that they were predominantly young, educated and easy to absorb into the workforce.

Mr Mike Bristow, of the Social Science Research Council unit on ethnic relations, at Bristol University, was the third member of the team, concentrating on the British immigrants. Although Britain's motives in taking 29,500 refugees are not called into question, more could have been done for the Asians once they arrived in this country, Mr Bristow believes.

While facing up to its responsibilities under the spotlight of world attention, Britain is said to have limited its response because of popular opinion. In particular, the Government is criticized for creating the impression that refugees would be able to settle in areas which subsequently proved unable to accommodate the numbers involved. As a result, half the Asians moved into deprived areas, not because they were attracted to ethnic communities, but because this was the only alternative to a prolonged stay in resettlement camps.

The researchers conclude that those who went to Canada would have satisfied immigration regulations in any case and that they were required to satisfy a shortfall at the lower end of the labour market. There was considerable competition for places to Canada, which is said to have sent immigration officials and medical testing facilities to Kampala to select the most suitable applicants.

In an article in *Ethnic and Racial Studies* the authors estimate that a quarter of the refugees going to Canada held British or Indian nationality and that this number was greater than the total number of stateless Asians not immediately offered places elsewhere. "Canada could have solved the entire stateless problem if it had not been so selective", Mr Bristow said.

Ethnic and Racial Studies, Vol 1, No 3, July, 1978.

Three centre project to look at youth employment market

by Patricia Santinelli

Research into the employment of 16 to 19-year-olds in three very dissimilar areas is being undertaken at Leicester University with a £30,000 grant from the Department of Employment.

The three-year study is concentrating on Sunderland, which has a very high unemployment level with a high demand for manual jobs; Leicester, a middling area of unemployment; and St Albans, a relatively low unemployment area with a fairly high demand for white collar workers.

Mr David Ashton, a lecturer in sociology who heads the research team, said: "We are looking at the way labour market conditions affect young people and the way firms structure employment for youngsters. That is, what level of education and skills they require."

When the project is completed, the team will have looked at between 4-500 firms, ranging from very large down to firms in different types of industries.

The Leicester study has already been carried out, but findings on individual areas are not to be published until the interim report, due out in nine months, in case they should be misconstrued.

The final report will not be available until 1980. It is intended to help policy advisers in the Department of Employment's career section, who require greater information about young people's employment in local labour markets.

"It will no doubt also prove useful to the career service as a whole in advising young people about jobs", Mr Ashton said. "Particularly since the service is having to move away from schools and take a stand in the local labour market."

Accountability work gets £200,000

The Social Science Research Council has allocated £200,000 to fund a number of studies of accountability in education.

A panel has been set up under Professor Jack Wrigley of Reading University and it is hoped that researchers will come forward with proposals for relevant work in different areas. The panel is concerned with the rights and responsibilities of various groups in the educational system and the methods of reporting and accounting between them.

Outline proposals for research should be sent to Mr Glyn Davies or Miss Anne Thompson, the secretariat of the panel, at the SSRC, preferably by September 11.

Moulding plastics for autistics

A code-like system of manipulatable plastic shapes, each of which represents a word, is to be used at Southampton University in a two-year research project into symbol utilization by non-verbal autistic children. The research, to be carried out by Dr P. H. Light and Dr R. E. Remington, lecturers in the department of psychology, is being funded by the Social Science Research Council at a cost of nearly £10,000.

Autistic children encounter particular difficulty in acquiring language skills. Many never learn to speak and are unable to comprehend spoken language. The purpose of the Southampton project is twofold. First an attempt will be made to assess the extent to which language deficient children can acquire effective communication skills, using a code system.

If such children can learn to use this system appropriately, the second phase of research will concentrate on the possibility of modifying the system. It will be done in such a way that it can be used as a method of teaching them reading skills with conventional orthography.

Psychological spheroids in Spacelab

by Robin McKie

A British university researcher joined workers at the Space Centre, Houston, this week, to begin preparatory work on the only psychological experiment so far scheduled for the forthcoming Spacelab missions.

Dr Helen Ross, of Stirling University's psychology department, will be involved in testing equipment for her experiment which has been designed to determine the ability to judge weight.

The apparatus consists of a box of spheres of various weights but all of the same size. The astronauts will compare pairs of spheres and will attempt to judge which has the greater mass. The ability to judge mass when weightless will be compared with the ability to judge weight under normal gravity.

Dr Ross said man's skill in estimating weight was based on a variety of complex perceptual factors and it was not known whether the mass of an object was more important than its weight in determining this. Under Spacelab's zero-gravity conditions, when the spheres would have no weight but would still have mass, it would be possible to calculate which was more important.

The experiment will be carried out by the astronauts before launch, then later on board Spacelab, and again when they have returned to Earth. Dr Ross will first be involved in calibrating the equipment on zero-gravity aircraft manoeuvres while she is in the United States.

She said that the experiment was the first purely psychological task to be scheduled for Spacelab.

Contaminants in the works

A British Leyland researcher is to spend a three year industrial studentship at Aston University looking into the effects of different contaminants on gearboxes.

Mrs Barbara Humm, who has worked at the Leyland advanced engineering materials research department at Solihull, near Birmingham, will carry out the work as part of her PhD.

She will study the effects of different contaminants on materials currently used in making transmission systems. She also hopes to discover what levels of contamination will affect the life of a modern gearbox.

Fish are made to swim in muddied waters

The Water Research Centre has awarded Aston University a three year £100,000 contract to study the quality of water in fishing rivers.

Mr Bert Hawkes, a lecturer in the department of biological sciences, hopes the work will lead to increasing the stock of fish, with consequent benefits for their human predators. The research is part of a long-term study being carried out by the centre, for the European Economic Commission, on the water quality requirements of freshwater fisheries.

The research will involve looking at the effect of sewage effluent on brown trout, roach and the smaller life on river beds. In particular there will be an examination of the effect of heavy metals in sewage effluent.

Apart from having an adverse effect on river life these substances can accumulate in food chains and eventually be eaten by human beings.

Three artificial streams at Checkley, near Uttoxeter, will be used for the work. One stream will carry 50 per cent of sewage effluent, another 75 per cent, and the third will be fed with clean water. Every fortnight, the fish in the different streams will be caught so that their survival, growth, condition and contamination levels can be determined.

Where to find research posts

The second edition of *Research Strengths* has been published by the Association of Commonwealth Universities. It provides information about 1,800 research areas in which universities in 18 developing Commonwealth countries can offer strong advanced study or research facilities.

Research Strengths of Universities in Developing Countries of the Commonwealth: A Register. The Association of Commonwealth Universities, 36 Gordon Square, London WC1H 0PF.

North American News

Row grows over campus links of the CIA

Relations between the CIA and American universities remain stormy, despite the recent efforts of CIA director, Stansfield Turner, to achieve cooperation with the academic community.

Recent hearings before the Senate Select Committee on Intelligence have provided further evidence of the differences between academic leaders, who feel CIA activities on campus should be subject to stringent limitations, and the agency which maintains that, in the national interest, it should have a freer hand.

Derek Bok, president of Harvard University, gave the committee correspondence he has had over the past year with Admiral Turner, which, he said, showed that the CIA plans to ignore the university's guidelines governing relations between the Harvard community and United States intelligence agencies.

In particular, the CIA intends to continue "covert recruiting" on the campus, and the use of Harvard academics in "operational activities", both of which are prohibited by the guidelines.

Covert recruiting involves the secret use of academics, administrators or even students to identify individuals — primarily foreigners studying in the United States — as likely candidates for occasional or regular service with the CIA.

A professor serving as a covert recruiter might, for example, use a seminar discussion to probe a student's views on international affairs so as to tell the agency about his or her attitudes, Dr Bok said.

"In a counselling session the professor might ask questions about the student's financial situation, not for the purpose of helping the student but to provide additional information to the CIA that might be useful in obtaining the student's services", he added. "Professors might invite students to social occasions in order to observe the student and gain background information of use to the CIA."

Dr Bok said such covert recruiting further undermined the "atmosphere of trust" essential for inquiry and learning, which "has already been threatened by the widespread belief that certain foreign governments employ agents to observe and report on the views and behaviour of their nationals enrolled as foreign students on American campuses".

For operational activities, "a professor's academic status is used as a cover to engage in activities which presumably include collecting intelligence on instructions from the CIA, performing introductions on behalf of the CIA, playing a role in a covert CIA activity, or participating in some other way in CIA operations".

President Bok gave an example which, he said, showed that "when the CIA uses professors for a variety of operational tasks, the motives and actions of all scholars abroad become suspect".

He informed a scholar who revealed a decade ago that his research findings in Nepal had, unknown to him, been reported regularly to the CIA. "Thereafter, the work of other professors in India became suspect and their research was subject to long delays and efforts to work in sensitive areas of the country were blocked", Dr Bok told the senators.

In his correspondence with Dr Bok, Admiral Turner advanced three main arguments to justify his refusal to respect the Harvard guidelines, which came into effect in May, 1977. (Harvard was the first major university to adopt such regulations, but at least 50 other institutions are currently working on similar guidelines forbidding undisclosed CIA activities on campus.

First, the intelligence agencies believe they have been unfairly singled out for special restrictions that do not apply to other organizations, such as industrial corporations. Second, the CIA, Harvard guidelines interfere unjustifiably with the freedom of individuals to offer their services to the government. Third, the CIA claims the "national interest" requires it to have confidential relationships with academics.

At present, the United States has no law governing the secret use of academics by the country's intelligence agencies. However, the CIA does have its own internal directive, whose text Admiral Turner revealed to Dr Bok.

It states, in part: "CIA personnel may not enter into any paid or other contractual relationship with full-time staff employees of any U.S. educational institution without first advising the appropriate senior official of the educational institution) of the CIA's intelligence affiliation, unless security considerations preclude such advice, in which case the individual's consent must be obtained. Any other relationship with any other person associated with a U.S. educational institution which could be interpreted as an attempt to influence unofficially the policies, curricula, or activities of the educational institution must be approved at the Deputy Director level or higher."

Admiral Turner insisted that the additional restriction of Harvard guidelines "is needlessly restrictive" and "is not required nor is it otherwise justified in the light of the possible difficulties which such action may cause to this agency's ability to carry out itself of a willing, talented source to assist the Government in the performance of legitimate duties in furtherance of the nation's foreign policy objectives".

Congress is currently working on a Bill, the National Intelligence Reorganization and Reform Act, that will lay down a new, extensive legal framework within which the CIA, National Security Agency, FBI and other intelligence agencies can work. It will not have time to get to



Derek Bok—"trust undermined"

the current session of Congress but is expected to be passed in the form next year.

A staff member of the Senate Select Committee on Intelligence, which is holding hearings on the Bill, says Congress "is caught in the crossfire" between the intelligence professionals, who are burdened with the idea of Congress tying down charters for their agencies as long as they are written in the most general terms, and the civil liberties lobby, which wants much more specific regulations.

President Bok, of Harvard, does not refer to the Bill when he testified before the committee, but other university witnesses—Most notably Clark Kerr, president of the University of California's academic freedom committee—attacked the draft version of the legislation for not going far enough in protecting the academic community from CIA activities.

The Bill does propose some safeguards, such as a prohibition on intelligence agencies using the academic institution as a cover, but according to Dr Bararz, they are insufficient, and the Bill "if enacted as presently drafted, will leave the door open to unacceptable intrusions by the intelligence agencies in colleges and universities throughout America".

He identified various defects in the Bill. For example, it fails to prohibit covert recruiting on campus, and it forbids secret contracts between an intelligence agency and an academic institution, but not between an agency and an individual member of the institution.

The proposed wording would also prohibit the secret use of American academics for operational activities abroad only if they are "sponsored and supported by a United States academic institution".

Computerized library on the road

by Ulli Schmetzer

FLORENCE

A blue van leaves the grilled gates of a former monastery in Badia Fiesolana each weekday for a trip through Florence. Its mission is to bring Europe's first computerized mobile library service.

At the moment the van transports only a small part of the enormous amount of books and periodicals it can "on loan" between the European University Institute housed in a converted monastery on the Fiesolana hills—and nearby university and state libraries.

Soon material is painstakingly ordered by telephone. But by the end of the year as many as twelve European universities and libraries, as well as the University of Florence, could be linked to a unique "computerized" network.

Equipped with the aid of a "typewriter" terminal, each network member will be able to consult an electronic catalogue at the institute to see if and where in the region required items are available.

Not only will the "brain" trace books but it can also reserve them for you when they will be available.

The service will not only expedite research at the 15-month old institute (which has ambitions of becoming a prominent post-graduate research centre) but give Italian students and researchers in the region access to material.

More important, the service could make a practical contribution to regional academic development by unlocking the "ivory tower" institute whose present Italian staff provides little or no value to the host country—despite a measure of prestige.

From an economic point of view it will dramatically cut library budgets by stopping duplication of books. It would be Europe's first digital library service based on computers and regional cooperation. There are similar computerized services in the United States and non-computerized systems in Britain.

The project is the brainchild of a British librarian, Mr Kenneth Hunnings, aged 61, the former librarian of Birmingham University and now librarian at the institute. He is also the president of Liber—the European Association of Research Libraries.

Following his appointment Mr Hunnings soon realized he would find it difficult to build up a comprehensive library capable of satisfying the elaborate requirements of an institute which is purely used for post-graduate research.

Helped by a staff of 24 he has, however, studied the institute's fully computerized library system to 70,000 books in 18 months with another 2,000 items available on microfiche. The target of the library is 200,000 volumes, still modest by any university standards.

The mini-computer in the institute library produces its own data bank which records book orders, acquisitions, details of the receipt of periodicals, expenditure and so on. It can even produce daily orders for overdue volumes.

Throughout the air-conditioned library room, electronic screen terminals are available for students and staff to consult the data base. Books are memorized under their title, the author's name and the subject matter.

Material at the institute falls into four categories researched by history, law, economics and social science.

Unequipped in borrowing from other European universities, first Hunnings's happy-go-lucky mail service and secondly by a chronic lack of book stocks (some editions only five years old are already out of market) Mr Humphreys cast around for help at closer quarters.

He realized there was a wealth of material available at local university institutions and libraries". he said. Initial inquiries ascertained that the books were the institute's requirement, the regional libraries were most interested in the excellent periodical service of the European institute.

Mr Humphreys's next step was to draft a modern regional lending project with the Council of European Libraries. The most important prerequisite for such a scheme is an agreement on a standardized computer system suitable for communication.

Australia

Defence academy deferred

from John Kirkaldy

SYDNEY

What was probably to have been Australia's last university founded in this century may not now be built. Casey University, which was planned to be built near the prestigious Military College, Duntroon, in Canberra, has been deferred by the Federal Cabinet and many regard this decision as final.

It was planned that building should have started within the next 18 months as a defence force academy for all three Services and it would eventually have a student population of 1,240.

There was considerable criticism of the plan both within and without academic circles. The cost of the project was to have been $A49m (about £26m) at February 1977 price levels. This would have constituted almost double the capital allocation ($A27m) for the next three years recently recommended by the Tertiary Education Commission (TEC) for Australia's existing 19 universities, teaching about 143,500 students.

The deferral comes at a time when the Federal Cabinet is grappling with its priorities for the Budget, which is due to be presented by the Treasurer, Mr John Howard, on August 15. (The Australian financial year ended on June 30.) There is every indication that the Budget will be tough.

The dispute over whether Australia should have a defence force academy has been a long one. The basic concept of the academy is that it would replace the degree stream courses of the Royal Military College, the RAAF Academy and the RAN College. At present, each of these institutions is attached to an existing university.

In 1970, the present Prime Minister, Mr Malcolm Fraser (then Minister for Defence), strongly supported the idea. It was rejected by the then Prime Minister, Mr John Gorton, as "imperfectly researched".

The idea was reintroduced last year by the Defence Minister, Mr Jim Killen, with strong support from Mr Fraser. Last September Mr Fraser wrote to parliamentary representatives for the Australian Capital Territory (ACT) outlining the proposals and the stimulus it would give to Canberra.

In the letter it was stated that the academy was a major project and "planning is proceeding with the aim of commencing construction in mid-1978. . .". Mr Killen has said he is not expecting a delay in the start of building work.

Since the project has come under the scrutiny of the Parliamentary standing committee on public works, criticism has mounted.

A submission, for example, from Adelaide University, prepared by its vice-chancellor, Professor Don Stranks, which was looked to the press, stated: "In our democratic society it is crucial that potential leaders of the nation's military forces should be exposed to a whole range of community attitudes and ideas".

The submission "deplored the proposal of the federal government to build a defence academy, to be called a university, when existing university facilities could be much better used".

Much media comment was hostile, concentrating on the expense involved at a time of financial austerity. Many past and present service personnel were also split on the issue. It is also rumored that some members of Mr Fraser's Cabinet were less than enthusiastic about the idea.

Other options are being examined by the committee including expanding the three existing service academies and the creation of an off-campus college close to a university. The committee will decide next month, but many consider that Casey University will now remain on the drawing board.



Mr Malcolm Fraser.

The student threat to a society in chaos

In the first of a series surveying Middle East colleges and universities, Dilip Hiro looks at Egypt whose university at Al Azhar marked the birth of higher education in the Moslem world.

In no other Middle Eastern country is higher education as widespread as in Egypt. Each year some 60-65 per cent of the high school graduates go on to the country's 13 universities and 112 colleges, most of which were started (or expanded) in the 1970s, to cope with the dramatic rise in the number of school leavers.

The current academic year opened with the student population at the universities alone exceeding half a million—a 100 per cent growth in five years—with the University of Cairo going beyond the 100,000 mark.

Cairo's university is a gigantic affair with 14 faculties spread out along a mile-long boulevard, just off the western bank of the Nile, and a corner of Bab el Luk square in the Nile, where the university's teaching hospital and medical faculty are situated.

The 13,000-strong faculty of arts—offering Arabic, and six foreign languages, including Japanese, history, geography, philosophy, sociology and psychology—is the biggest, and commerce runs a close second. (Probably half of the students in these disciplines are external. They do not attend lectures, and come to the university only to take their finals).

The fastest growing department in the faculty of commerce is business management because of the high demand for graduates in the job market, and the reputation enjoyed by the department due to the use of the staff loaned by the American University in Cairo, the smallest and the most prestigious university in Egypt.

Business management is much in demand at the American University in Cairo (AUC) as well. Half of its 500 postgraduate students are enrolled in the management programme, established in 1966, which has acquired a reputation far beyond Egypt.

The same is equally true of the AUC's undergraduate courses—in the arts, social sciences, and pure sciences. A stringent method of selection keeps the undergraduate body steady around 1,000, the lowest in the Middle East.

The AUC is a private institution registered in Washington D.C. Almost half of its teaching staff is American, making it even more American than the redoubtable American University of Beirut.

The undergraduate and graduate programmes use American techniques, textbooks, and audio-visual materials. English is the medium of instruction.

This puts the children of the Egyptian elite—who often go to English-medium schools—at an advantage, since they perform very well at the English language entrance examination.

The university charges low fees —Egyptian £200, British £160, a year — from the Egyptians, who form four-fifths of its student body, leaving it with a heavy deficit in its annual budget of $9 million, (Egyptian £6 million). Most of this deficit is covered by donations and gifts from the American citizens, companies, foundations, and, most significantly, government (which reallocates some of the local currency received for its food exports to Egypt to the AUC).

The American University has a long history of interest in the social welfare of Egypt. Four years after its founding—in a century-old palace of a Pasha in central Cairo—to teach English and Arabic at university level, the AUC started a special division to undertake health and welfare projects.

At the end of the Second World War it added an adult education programme and renamed it the public service division. Today the main activity of this division is to teach Arabic to non-Arabs, and English to the Egyptians. Of the 7,500 people handled annually by the public services division, two-thirds are students of English.

The university runs a special English Language Institute. It provides scholarships to some 200 English language teachers from the Ministry of Education and is also working with the ministry to help improve the teaching of English in schools.

Among those who flock to the AUC's public service division classes are many of the students from the Institute of Education of the Ain Shams University. Situated in a north-eastern part of Cairo—on the site of the ancient university of Aun, dedicated to the worship of the sun god Ra—the Ain Shams University was founded in 1950 to meet the demand for education after the war.

It is now almost as large as the University of Cairo, and is equally overcrowded. The average teacher-student ratio is 1 to 120, with certain sections, such as the Institute of Education, having a ratio of 1 to 300, against the American University's 1 to 15.

Oddly enough, student enrolment in the Arabic department of the Institute of Education is so low and the demand for teaching Arabic both in Egypt, and the Arabic-speaking parts of Africa, so high that the government offers a modest stipend to all those who join this department. On the other hand, there is such a rush to enrol into the English department that the applicants are screened.

The other major change over the past generation at the Ain Shams and elsewhere, is that women are allowed to enrol and attend mixed classes. Women now form a third of the Ain Shams's student body of 95,000, and there are more women in the arts faculty than men.

The only exception to co-education is the Al Azhar, the world's oldest university, where men and women are taught separately. Established 1,001 years ago, at the Al Azhar mosque in Cairo, this centre of learning was later to become a model to the European universities based on the principles of combining a place of prayer with that of higher learning, and having the students live on the premises.

The gown worn by the teachers at Europe's classical universities is a variation of the dress used by the sheikhs (i.e old teachers) at the Al Azhar. And the use of the term "chair", to describe a discipline, is rooted in the fact that the sheikh at the Al Azhad sat (and still does) in a chair, by a column, while his students squatted on the floor in front of him.

At the Al Azhar, the practices of the past continue, with the students attending lectures inside the mosque, where individual classes are marked by nothing more specific than a column. The star attraction of this unique institution is still the study of Islam which draws students from all over the Muslim world.

In 1965 other faculties, with their own premises built next to the mosque, were added to the university, and there are now nearly 50,000 students on the two campuses, one for each sex. However, even the non-religious faculties stress the study of Islam. The medical students, for instance, have to take courses in religion for the first three years.

The most popular discipline at the Al Azhar, or any Egyptian university, is medicine—followed by engineering, business management and English. A law applied through the Central Organization for Manpower Planning, guarantees a job to a university graduate, once he has completed his compulsory military service, with the job fetching Egyptian £25 (£20) a month for a sixth grade civil servant, to Egyptian £40 (Br £33) a month for a newly graduated doctor.

The result is a highly inflated bureaucracy—a price the government has to pay to ensure that there is no large body of unemployed university graduates likely to turn militant political ideologies or violent action.

Despite all this, the university students played a fairly important role in resisting the deNasserization process after President Sadat inherited it in the early 1970s. But the tide turned in Sadat's favour after the October 1973 war against Israel and, since then, the conservative forces have been gaining ground among the students in Egypt.

At the Ain Shams university, for instance, the "religous group" did so well at the last election of the students' union officials that it reduced the strength of its adversary, the "political group", from 41 to 7, capturing all the seats its rival lost.

"There are basically two currents among the university students today," said Dr Hamood Khafeef of the Al Azhar University. "The socialist students speak of socialism and democracy; and the other kind speak of God and faith. The religious current is the stronger one now."

No doubt the conservative trend at the universities received a further fillip by the violent events in June in the two Yemens—the assassination of the president of North Yemen, and the execution of the president of South Yemen by the more radical elements in the country—which brought an unprecedentedly harsh reaction from the conservative Arab states, culminating in the call for economic boycott of the Marxist South Yemen by the Cairo-based Arab League.

However, it is hard to see how this swing to religious politics on the campuses, or off them, can help solve the mounting economic problems of Egypt—rising inflation, gradual impoverishment of large sections of society, and breakdown of public services—that affect the university community as much as others.

The presence of an ever-increasing body of highly literate citizens, in such circumstances, can pose a real threat to the social system as a whole. Aware of this, the Egyptian government is already considering ways of restricting admission to the universities and colleges.



The Al Azhar University

Ngaio Crequer reports on a survey that asks if a national information service is needed

Team tests potential in credit transfer market

In the next few weeks every higher and further education establishment in the country will be considering its response to a questionnaire on credit transfers. Their answers will largely shape the conclusions of a feasibility study being conducted by Peter Toyne, a geography lecturer at Exeter University, funded by the Department of Education and Science.

For, as he freely admits, if his research shows that a national information service could be set up, to provide comprehensive information on transfers and "equivalent" qualifications, it could only work with the full backing of a large majority of those establishments.

A number of students at present do transfer between different institutions and are credited with their study. But it is done on a very informal basis and the information is not tabulated in any way.

What Peter Toyne's team of three have been asked to discover is whether there is a case for a central service. Is it necessary, feasible and how much would it cost to provide a national service for recording and providing information on credits in respect of students' previous studies?

One of the first things he will look at is what kind of credit transfer systems operate at the moment. First there is the Open University, which has reciprocal agreements with seven universities: Essex, Kent, Lancaster, Salford, Sussex, Heriot-Watt and St Andrews. Students are able to transfer from the OU to them and be given "advanced standing", that is, successful completion of an OU course of study will gain them exemption from part of their course at the traditional university.

But as all are keen to emphasize there is no automatic right of entry for an OU student. It still remains the absolute prerogative of any university to decide whom to admit. OU students would be considered depending on the availability of places, the appropriateness of the courses taken and the level of base.

In general Essex, Lancaster, Salford and Kent will regard one OU foundation course credit as a minimum requirement for entry to a first degree course: at Sussex one and a half credits are required. Most require three or more OU credits for admission to the second year. Admission beyond the beginning of the second year is theoretically possible at all except Salford, but as the OU tells its students, it would be "exceptional" not least because the structure of most degree courses at conventional universities is such that third-year courses lead on from second-year studies.

But these transfer schemes are still in their infancy and only affect a very small number of students. At Lancaster last year, for example, there were only two former OU students who had gone straight on to the second year of a particular course. In fact Lancaster has found that many OU students prefer to start from scratch and do the full three years.

Although these universities have formal agreements with the Open University others either have enabling legislation to allow them to consider exemptions for particular students or for departments to follow their own informal practices. At London University, for example, schools would look at *any* particular case on its merits. Edinburgh University's arts faculty last week reached an agreement with the Open University.

The reverse also operates. The Open University will take students from conventional universities and give exemptions for successful completion of previous studies. A student might be given two transfer credits for a year's study at a conventional university, with a maximum number of four credits.

As the Open University has many more applications than it has places it does not want to let transfer students in at the expense of its other applications. It is currently negotiating with the DES for some kind of quota system, so that it could allow in 100 transfer students to higher level courses. They would not have to take the foundation level course. The DES has welcomed this as an experiment but the Open University hopes that provision for these students will eventually be made as part of their normal DES grant allocation.

The Open University also has an enabling agreement with the Council for National Academic Awards which allows polytechnics and other institutions to operate similar schemes. The CNAA has issued its own guidelines and says that "in appropriate cases" institutions will be enabled to exempt from the first year of a BA, BSc, BEd, or DipHe, applicants holding two or more Open University credits, including at least one post-foundation level credit. In general the CNAA regards the possession of one or more foundation credits as the kind of evidence which institutions should find acceptable from mature students.

Another organization which already has some experience in this field is the British Council. It runs a national equivalence information centre and gives advice to British and overseas students on courses and qualifications. It is one of a network across Europe. It stresses that it is not a validation centre but is simply there to give advice.

A student, for example, with an Egyptian degree wants to do post-graduate work in this country. Does he have the necessary qualifications, what is his degree worth over here, how many years of study is he exempt from? These are the kind of questions that a national information service would attempt to answer for British students.

Mr Ken Whittey, the acting assistant director, higher education and science department of the British Council, said the eventual aim was to set up a comprehensive network making use of a computer data base. "It could be used throughout Europe and people could plug in and get information in the same way now as you go to an agent and find whether a flight can be booked."

One of the issues with which Peter Toyne will be concerned is whether there are sufficient organizations in the field already, that is, is the service already provided. But certainly one of the problems encountered by the British Council is that a lot of students do not know they are there, or what they do provide.

And the British Council has to go out to other organizations to get its information. It gets approximately 100 inquiries every day, half from overseas students. Other students will try to get assistance from different bodies. The scale and nature of credit transfers is part of the brief of the feasibility study team.

So far Peter Toyne has visited about 100 organizations and he says the reactions have been different from those expected. "I was told that the universities would be against, the polytechnics would be interested and the colleges would be very keen indeed. In fact there has been a very wide range of opinion expressed but no group approach from anywhere."

One of the problems he will have to resolve is whether, if a national service were feasible, the information would be available to the institutions alone or also students.

"Some students who want to transfer from one institution to another could be unsure of themselves and would need some kind of counselling. It would not be enough just to feed them information.

"But the other problem is that they will not have a right of entry to a course simply because on paper they have the necessary 'equivalence'. It is still up to the institutions to say who comes in. I do not think the majority of academics would like individuals to have access to this information."

There is the added problem that an institution might not want it to be widely known—at least to the casual student—that they admitted a person to one of their courses with apparently low qualifications. A university will look at all the factors on admission but would not be there to explain if the information was stored in a data bank and was readily accessible to all.

One of Peter Toyne's team is a computer expert. Inevitably, if a national information service is going to have at its fingertips information about every course, every institution, and "equivalence" the computers have to come into the picture. He says the team has got round to the problem of setting an information service. But thinks that if the DES is prepared to fund a research inquiry, at a cost of £60,000, to see if a service is feasible, he would be surprised if they were told that one was necessary, and then they did nothing about it.

But one of the benefits of a formation service might be to drop-out students would be able find a course which matches their requirements, so the wastage could be cut.

If a housewife has watched her children grow up and wants to either return to or begin some form of higher and further education, where does she turn? Similarly, a mature or delayed entrant student wants to know whether he/she has of O levels, HND qualifications and work experience will count when he applies for a course. Or he does he or she find out about a course that was started just before the kind of person?

Is a national information service needed to help these students and the institutions that exist to help them? Peter Toyne hopes he will know the answers when he submits his initial report at Easter.

Chilean iron fist now in velvet glove



Included in every Chilean student's syllabus is a compulsory course on national security. It is designed and run by the military and consists largely of anti-communist, nationalist propaganda. Such is the continuing character of higher education in a country which, despite an apparent relaxation of counter-revolutionary terror, still produces a steady stream of refugee students anxious to continue interrupted studies at British institutions.

Another 120 Chileans are waiting to take up places at universities or polytechnics in Britain despite the recent amnesty declared by General Pinochet, which was said to be a measure to allow political prisoners to be fully incorporated into political life, thus reuniting the country. In practice, the whereabouts of up to 2,000 people who have disappeared since the 1973 coup remain unexplained and the majority of those who have applied to return in Chile have been refused.

Students in London and Santiago were among those who staged simultaneous hunger strikes as the latest attempt to persuade the junta to release information on the fate of the missing prisoners. The aim was partly to provide a new initiative in this quest for information that Mr Alan Christie, the new deputy president of the National Union of Students, flew to Chile this month for a week of meetings with student, labour and church representatives, as well as former colleagues and the families of some of those still missing.

Individual student unions in Britain raised £800 to send Mr Christie on a fact-finding mission which was also intended to establish contact with Chilean student organizations and to assess the state of higher education there after five years of military rule. It was the third such exercise sponsored by NUS and the openness of the visit was an early indicator of changing circumstances. In 1974, when Miss Doris Procter went as a member of the NUS executive, the visit was a well-kept secret until he returned to report on a series of clandestine meetings. This time it was possible to take advantage of the junta's open invitation to foreign observers and Mr Christie's visit—and its purpose—were reported in the Chilean press.

But beneath the apparent liberalization Mr Christie found continuing hardship and repression, albeit of a more subtle character than before. The report of his visit and his views on human rights in Chile were carefully scrutinized by the Government censor before publication and those who arranged meetings with trade unionists and former prisoners were anxious to conceal their identity because of the habitual fear of harassment among those opposed to the junta.

Not surprisingly, Mr Christie did not succeed where relatives, foreign governments and even the United Nations had failed in the attempt to obtain information about the missing prisoners. He had gone fully briefed on three specific cases but was never allowed even an interview with the Chilean authorities. Relatives of the three men concerned had been offered death certificates to allow them to claim some state benefits, but the junta continues to deny any knowledge of their fate. The offers were refused and the campaign goes on in the hope that the men are still secretly detained, but as the years pass the chances that these and many other prisoners are still alive seem slim.

Little has changed, either, in the Chilean universities, which are still in the charge of military rectors, who were appointed after the coup and destroyed the democratic system which had evolved. Many staff and students were immediately expelled and tight controls placed on the curriculum because the universities were seen as hotbeds of radicalism. Student organizations were forced underground and suspect subjects, including virtually all the social sciences, ceased to be offered.

Today the controls are as tight as ever, although Mr Christie did find evidence of some activity, mostly social rather than political, among some of the students. With the exception of a small number of private research centres which cater mostly for postgraduates, higher education in Chile is concentrated exclusively in the eight universities. The number of students has been cut by 30 per cent since the coup, and now stands at 33,200 in a nation of 10m. The University of Chile, which caters for the majority of the country's student population, has suffered most, with strictest form has hit the universities hard as well as severely restricting the number of potential students. Spending on education has declined from 1,262m to £174m at 1976 prices and higher education is geared to strictly vocational courses. Research has been drastically reduced and, because of the low priority higher education merits, equipment is not replaced and the fabric of the institutions is deteriorating.

Because of the considerable financial constraints, higher education has become the preserve of the wealthier classes. For those who can afford the fees now introduced for secondary education, greater obstacles lie ahead in the form of fees first for sitting the entrance examination and then for the course itself. At about £6 the cost of merely being examined is the equivalent of a fortnight's wages for an unskilled worker, there is then a registration fee of a similar amount and a sliding scale of tuition fees after that.

Despite a system of exemption for the very poorest and the introduction of five per cent of places on university courses for workers, few of those from peasant or workingclass backgrounds ever reach the campuses. In the shanty towns, where unemployment often runs at up to 70 per cent, the prospect of a university education is laughable.

However, the select few who do become students are now beginning to make contact with the workers, even in the disease-ridden shanty towns. Mr Christie found. Official student representation is strictly limited and student unions, as they exist in Britain, would not be tolerated. But an undercurrent of change has been brought about by involvement with workshops which have developed study groups concentrating on Chilean culture.

The workshops were founded to provide a source of income for the unemployed through craftwork—a necessary development in a country which has abandoned many welfare services, where inflation had to be reduced from 1,000 per cent a year and where unemployment even in Santiago is at least 13 per cent.

Interdisciplinary study, beginning to emerge through the workshops' reading and study groups and an alternative social programme open now open to students. "Extra-curricular activities have not been encouraged but now there is at least some base upon which the students can build", said Mr Christie.

The contact which these activities engender is bound to bring home to the students the effect of whom have been cushioned from the effects of the junta's policies, the reality of life for the majority of their countrymen. Because of the cutbacks in public expenditure, some 300 doctors are estimated to be unemployed, despite the chronic lack of medical services in many parts of the country.

Mr Christie said: "It is obvious that from seeing the shanty towns, where streams now running through the shacks, or the city, where many professional people are unemployed, that there is economic repression even if the crude methods, such as torture, have ceased."

Now NUS hopes to foster an atmosphere which encourages influential bodies, to put pressure on the junta or allow refugees to return. Pronouncements by university vice-chancellors in Britain about the state of Chilean higher education might have an effect, Mr Christie was told, and contact with trade union, church and political organizations would be welcomed.

It is hoped that Mr Christie's experience will provide the basis for discussion not only by British student unions but also at the Finsec festival, as the situation in Chile continues to occupy a central position in the concern of the international student movement.

John O'Leary

Methods may have softened since the days of overt book-burning but an underlying toughness remains.

Vinian Smart lets his mind wander towards a new ideal university

had a dream the other day. And we can use the dreams we can get, us we roll onward ssily towards the 1980s: a decade when ophy could be dangerous and morale the mbling mortar of academic life. Experimation may be never more necessary. My am of course is only a thought experiment, it may attract the notice of some benevo- tycoon—and, who knows? it may become ity.

dream sees a rather jaunty young Renssance person crossing a renovated square one of the bits of the big city that needs a . The dream came to me partly from a ssive attack of educational boredom-ded and partly from thinking how much of ingham University is, by way of physical t, unnecessary.

What do we notice as we approach that ex- llent seat of study and research? Probably a ckstower; perhaps a large library, like a odwick version of Minsk city hall; residen- al piles, great blocks subtly unproletarian; student union; a faculty club; huge physi- laboratories; engineering buildings; a spital perchance; an arts tower; a social ience facility; a computer building; tennis urts, and even, with luck, an Olympic run- g track; multi-storey carparks; a scatter- g of prefabs; administration buildings; and stately home or two cannibalized for exten- ion classes and supreme administrators' dwellings).

The clocktower bespeaks the tyranny of demic time, of terms and lecture hours d examination schedules. It clangs out 10 to he hour, and sets life scurry afoot from class class. To make a university workable it ems that time has to be chopped up into ite units. If Jerrishgham were to change into Rethought University would the clock- ower still need to stand?

The library dispenses its books through an laborate mechanism of librarians. Yet now- days few libraries are really adequate for search, nor do they always directly and lly cater for the needs of the student. Are there ways, then, that the book operation can be rethought?

The residences remind us of an irony. They represent, or used to, an older collegiate deal, which saw adolescence as a rite of pas- ge, a mixture of austerity, high jinks, grave old customs, communal living and elitism. But that ideal has decayed somewhat into heartless tower-blocks and effluvient kitchens. The irony is that the students have generally fought to treat the university so far as pos- ible like a landlord. None of your *in loco parentis*. Admittedly the UK is scandalously short of small apartments and the life for the single and the barely married; but why should higher education be a mechanism for dealing with (admittedly just a small part of) the problem?

A student union building? It seems to rep- resent special provision for what is after all a general social need—a blend of pub, billiard hall, community centre, office building, palais de dance, public baths and airport lounge. And this remarks go for a faculty club.

The physical laboratories and engineering buildings are more to the point. But in my dream they were not to be seen. I must have been pondering the extent to which the same facilities seem to be reduplicated in so many institutions. Overprovision of lab space seems to have been a main effect of our masters' fixation in the groves of white-hot-technological-revolution days of Harold and of the mystique of events leading to the bureaucrats' reorganization of higher education.

The computer building reminds us that the Jodrell Bank giants did, all of 30 years ago in Manchester and Massachusetts, little or nothing do now. Perhaps pocket models are the way ahead? Still, computerization is so much the essence of the future that we ought to think about how much Renaissance person ought to know about it. Maybe, with computers getting smaller and smaller, we still need a figure with immense power.

The administration buildings also give us pause to think how much work is generated by the academic body by its being a large-scale (usually bad) caterer, hotel manager, landowner, multi-storey carpark administrator and what not the rest. And think how simply many records could be handled by one computer, not that we need necessarily less bureaucratization but, as we shall see in Rethought University, their energies would flow elsewhere.

In brief, as we approach and wander round Jerrishgham University we are making a trip through a very expressive and expensive taxonomy—a body which indicates the set of Jerrishgham's soul. Mr Rethought University looks somewhat different. It arises in its own way to provide for the ideas and values which should go into the making of a version of Renaissance person.

That is someone—and here my dream is perhaps a touch extravagant—versed reasonably in what may be called the liberal arts. In fact, that might be a way of looking at my Rethought University, as a kind of liberal science college. As an educated person, he should have a general grasp of how science has developed, especially perhaps in cosmology, with its history of symbiotic interpenetrating giving way to the dizzying expansion of the universe; the principles of relativity theory, partly undermining common sense conceptions; and evolutionary theory, animal communication and brain physiology. All this would presuppose a grasp of elementary physics and physical chemistry, and some knowledge of mathematics.

He should by all this acquire what might be deemed an understanding of philosophical science, that is, a way of understanding which does not imply that the person can through it be a physicist, botanist or whatever; but rather that he has the materials with which to think intelligently about science. If he could do this he would do better than a lot of current graduates in science, not to mention the merely scientifically ignorant arts and social science graduates of these latter decades.

By the same token Renaissance person (who by now had better be accorded the privilege of being female) should have her eyes set, too, upon the human sciences—some induction into history, economics, religion, sociology. There should be opportunity to explore the literature of the world. Indeed, there is much to be said for a comparative view—whether in literature, religion, history or economics. The educated person should know something of planetary history, and of Russian as well as English culture.

Unfortunately in Learningham very often the craft dictates content—the discipline of history is taught meticulously, but it ends up that the burghers of Ipswich in the 1540s loom larger than the Tang dynasty. But if we are to be philosophical in our approach to humanity we need a planetary view. And in all the human sciences there should be emphasis not just on structures but also upon the phenomenology—the "feel" of people's experience and action.

And the practical arts? What of painting, making music, computer programming, engine repair and so forth? Renaissance person is not one to stay aloof from these. And of all the skills, perhaps the acquiring of a language other than one's own is the most enlightening, and the most philosophically illuminating, as well as providing a key to all kinds of doors into other people's minds.

I am not saying that every student at the Rethought University should be a Renaissance person. But he should have the opportunity. And if it is possible to compare Dickens and Dostoievsky, it is also possible to spend much time on the latter and on Russian literature and history. To have the broad possibilities is not to restrict the narrower ones. What, then, is the minimal shape of an environment for this person? I'll begin with time and the absence of a clocktower. Once we get away from the idea of a university course as a competitive operation of fixed length, and move more to an American style or a Swedish one, we may also be bolder and no longer look upon it as a great (however flexible) dollop of a degree. Not that I am against degrees. About the only power a university has is the power to stop someone getting one. But though a person should be able to wend his way through a pattern to reach a kind of wholeness and so arrive at a degree, the partial skills and knowledge she gains upon the way are important, too. Why not recognize them?

I would like people to be able to have proficiency certificates in such things as the following: a language or an aspect of one (say, German for scientists); political geography—knowledge of the countries of the world, their capitals, principal industries, languages and so on; elementary meteorology; the history of physics; the principles of prosody; elementary statistics; computer programming; perspective; mathematical logic; and so forth. Meaningful clusters of courses could also be recognized, by independent certification.

But if a student wends his way through a sufficient number of offerings organized in an acceptable pattern, why, then let him be granted a degree (with a class—why not?).

It is not just the question of the long-term that has to be looked at. Our clock-tower would not exist because also deeper concern should be felt at inducing what may be described as intensity of leisureliness in our courses, not to mention a kind of unscheduled teleology.

Leisurely intensity is possible by making each unit typically a month's duration. Nothing but that topic or subject for a month, with one professor or maybe two. In January, Professor Murgatroyd will be reading Machiavelli, in February Rousseau; in March Professor Murphy will be contemplating the origin of the solar system; in April, it will be the stellar dynamics; in May, Professor Murray will be discussing Weber on Chinese religion, and in June on the religion of India.

And unscheduled teleology is provided for because the university would have an important placement and examining function. After a month's intensive Spanish, a student can hotfoot off to Spain to live for a goodly stretch if he wishes and can, and not credit for his improvement in the tongue upon his return.

Indeed our Rethought University should try as far as possible to live in symbiosis with the whole wide world. That should be a major preoccupation of the administrators—creating placements, attracting funds, inducing industries to help research, getting professors off on sabbatical leave, cooperating in theatrical productions, joining in cultural festivals, liaising with publishers and so forth.

Since, with no clocktower, students could take a leisurely length of time to get as far as their degree, they could often take months off for work in industry and elsewhere: as we have indicated, such intercalated work would be a good opportunity for credit-generating projects. The task of administration and professors should be to harness this way the world at large to be the teachers of the students for at least part of the time. Lot the wide world be the great resource.

The researches, whether of undergraduates, graduate students or the professors, could substantially occur away from the campus, except there wouldn't actually be a campus, as we shall see. Thus consider libraries. If our university is in a big city there should be plenty of existing library resources. Admittedly the Rethought University could do with a fine small reference library, with plenty of periodicals, and a large provision of pleasant study places. But since a university library rarely has the latest books it would be cheaper and more efficient to make good allowances to the professors on acquisition books, bought were housed in their study and available for borrowing or for photocopying.

Yes, indeed, photocopying! The photocopier is already revolutionizing research and study. There is scarcely any need for the texts when they can be so easily borrowed and copied. If authors wince at the thought, at least our system at Rethought encourages professors to buy more books. The R.U. library will be reference books, periodicals, study spaces and a lavish battery of photocopiers.

In fact the R.U. will only have four facilities: the "library" such as I have described; a strong computer; some large halls for big gatherings and films, drama, etc.; and a whole lot of handsome offices, big enough for seminar meetings and holding the desks and bookshelves of the professors.

For it so happens that most of the subjects and areas of work in which Renaissance Person is likely to work do not need more than people and some books to explore. It is true that audio-visual aids might help, and they could be part of our library operation. But by and large in the R.U. the work would be largely a matter of seminars through the leisurely intensity previously described.

As for residences, sports facilities, clubs and social facilities these should be part of general social provision. Should be? Surely every dream is now beginning to get very unrealistic. Well, let it buy realism by expanding.

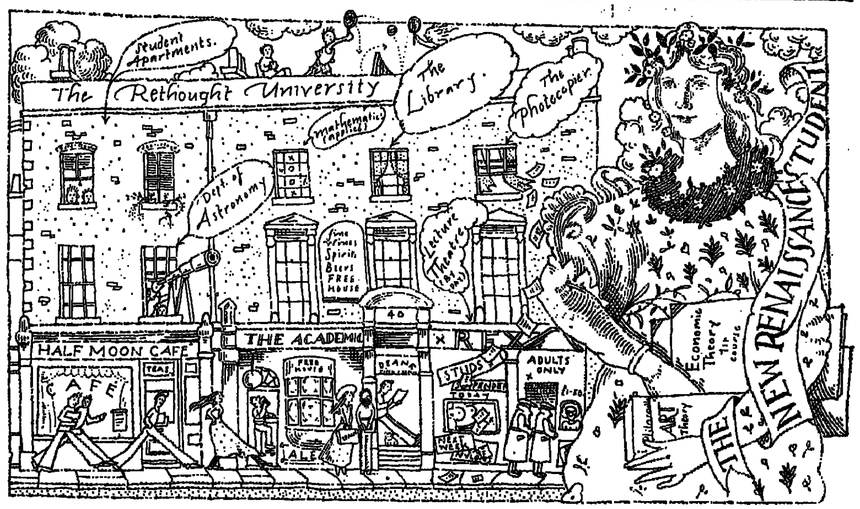
What might be envisaged is not so much a Latin Quarter as a Learning Quarter. Imagine a run down and partially demolished area of one of our big cities. Imagine an ambitious and thoughtful property tycoon and an adventurous city council. A whole quarter could be filled with good small apartments and flats, and pubs and cafes and restaurants—serving the population at large, but also including enough space to accommodate a share of R.U.'s students. A large decaying city square could be saved and become the candidate for the professors, and scattered offices for administrators. Tennis clubs and squash courts could be created. The Library and the computer building could be specially designed; and various halls could exist on a purely commercial basis, showing X films by night and listening to public lectures by day. And an area of waste land could be designated as the beginnings of a research park, if industries were inclined to cluster their research fruitfully near R.U.

But what of/the/so of the great laboratories? As we have seen, most of what is to be done at Rethought is to be done by means of paper and grey matter and the computer. Theoretical astronomy; applied mathematics, including much of theoretical physics; operational research; systems engineering; computer science; meteorology; statistics; population studies; economics—such would be a range of the offerings possible even without the laboratories. It is also worth considering that modern electronics is shifting the problems of engineering and production increasingly towards cybernetics—towards in effect manufacture rather than manufacture.

So initially our R.U. would cost three or four buildings, a computer and a whole lot of studies, plus the salary, of 400 of so professors and administrators and doubtless a few score secretaries, together with a small number of technicians and others. Moreover, the offices themselves would be an excellent investment, as they would involve the vast increase in the value of a renovated city square or two. The restaurants, the pubs, the apartments, the cinemas—these ought to look after themselves.

But it will be said: it would be more expensive for students at the R.U. Well, they could always get extra grants for costing us so much less than in other ways.

Perhaps some tycoon will hear of this strange dream. After all, in real estate terms the whole thing would still make a lot of sense. And perhaps the real estate of the mind would gain from being rid of so much hardware. Hard heads and soft ware—that is what my dream was about.



Dream of a future Renaissance

The author is professor of religious studies at Lancaster University and the University of California at Santa Barbara.

Rosemary Cramp reviews recent excavations

Tracing the fusion of cultures that made Northumbria

At the height of its power about AD 700 the most northerly of the English kingdoms stretched from around the Humber and the Ribble to the Solway and the Tweed. The origins of the kingdom, how its people and its culture became distinct and influential entities, is still not entirely clear. Over the last decade, however, archaeology has helped to unravel some of the problems and to provide illustrations for the literary evidence, particularly for Bede's *Ecclesiastical History*.

The first Germanic people in the North no doubt, as in other areas in England, served as soldiers under the control of the Roman army. Hadrian's Wall and its hinterland forts have produced some evidence of Germanic presence, mainly from the sixth century. However, recently, excavations at Piercebridge, the Roman fort and settlement on the Tees, have produced fifth-century Anglo-Saxon pottery.

These excavations, in which Roman buildings are slowly unravelled from the gardens of accupied houses and where any part of the village can become an archaeological site, are being conducted by Peter Scott. So far they have not shown the buildings in which the early English in Northumbria could have lived, but it is clear now that Roman traditions in the North were not obliterated at one fell swoop but that the life style changed slowly.

Under York Minster, excavations, conducted by Derek Phillips among the modern supporting steel girders for the Medieval Minster, have revealed several phases of the rebuilding of stone buildings after the fourth century. Moreover the stone fortress buildings seem to have stood until the ninth century.

Gradually, however, in most areas, Roman traditions of plastered stone buildings and industrial products such as wheel-made pottery, gave way to the wooden houses and hand made village produced pottery of the Germanic tradition. In Yorkshire at least, Christianity and its practices gave way to the paganism of the Germanic world. No pagan Anglo-Saxon cremation burials have been so far discovered north of the Tees, and so it is possible that some form of organized Christianity survived through the sixth century.

North of the Tees, in that part of Northumbria which took the British name, Manucia, the native British kings fought hard in the fifth and sixth centuries to throw back or to contain the advancing power of the English. Their efforts were in vain, however, and by 616 an English king had cut off the links between the Britons of what is now southern Scotland and North Wales.

It seems likely, however, that the English occupation of Bernicia was initially much less intensive than that of Deira (Yorkshire) and that the new English overlords of the area ruled over largely British subjects. The English princes and kings also were influenced by their non-Germanic neighbours, British and Scots from Ireland on the West and the Picts in the East.

Brian Hope-Taylor's excavations of the Saxon palace of Yeavering, in Northumberland, just below the biggest hillfort in Northumberland, showed that the earliest feature on the site was a great circular fortress which reminds one of the British forts further north. The great timber halls over 90 feet long, the wooden grandstand shaped like part of a Roman amphitheatre and the precise carpentry of all the structures show us something of the resources and achievements of the seventh century Kings.

Nearby, on the Millfield plain, Roger Miket's excavations at Thirlings, which are continuing this month, have discovered the houses of their subjects. So far three houses have been excavated, measuring about two metres by six metres internally. Their structural characteristics with spaced posts and panels of planking in between, their porches and buttresses, are paralleled at Yeavering.

The Millfield plain has been extensively occupied from Neolithic times onwards, and here the English seem to have settled down alongside their British neighbours, even as Anthony Harding has found in his current Millfield excavations, burying their dead inside Bronze Age Henges. The dress fastenings of this people, found in this little group of burials, are very similar to those from Driffield in Yorkshire, though the rite of cremation is not represented in this sixth-century group.

No structural evidence of a native British church has yet been found in Bernicia, however, and indeed, if Bede's evidence is correct then the Britons made no attempt to convert the English Northumbrians. This task was undertaken by foreign missionaries sent by other kingdoms, and the Scots whose great monastic centre at Iona had already established itself as the most important missionary centre in Scotland.

At Yeavering a building with a porched end was found which was considered by the excavator to be a pagan temple converted into a Christian church. The building, if it is a church, is the only one which might be attributed to the Roman mission to Northumbria. In shape, some of the Yeavering buildings interestingly prefigure the stone churches of Northumbria, such as Escomb.

It is in the late seventh century that something distinctive which can be called Northumbria emerged. The acceptance of Christianity broke down barriers between the Northern English and their Celtic neighbours, just as it brought all the English into the European community. In many ways the continental influences which were absorbed by English travellers from the late seventh century were of paramount importance, but the individual flavour of Northumbrian culture derives from a combination of British, Irish and Pictish influences with English and Continental traditions. It was a rich mixture.

The chronicler of Northumbrian Christianity, indeed of all English Christianity, is Bede, who entered the monastic life at the age of seven at Wearmouth, and died in 735 at the age of 63 at the twin foundation of Jarrow. When he was born, every Northumbrian over the age of 35 would have been a pagan, when he died the Christian learning and culture of Northumbria was known and respected all over Western Europe.

Ten seasons of excavations on these sites has revealed a good deal of the milieu which produced the works of Bede. At Monkwearmouth, in 673, Bede tells us masons and glaziers were brought from abroad in order to build for the founder Benedict Biscop, a church in the Roman manner which he had much admired. The western part of the church still stands and traces of a southern porticus have been discovered by excavation. Its foundations have shown that in the same phase the Gaulish builders built a long covered way, 120ft long, from the church.

At a later phase a range of buildings on the same axis of the church to the south are built over it.

Already before these stone buildings were constructed, a lay cemetery existed on the site and before the planned regular layout of the gallery and the associated buildings there seem to have been irregularly planned stone structures which could be individual cells. The history of the site as unravelled by archaeology shows a change from an irregular seven-fold layout, which reminds one of secular settlement, to an ordered plan with a layout like an embryonic cloister.



These excavations in 1976, though not specifically referred to in article, took place in York.

At Jarrow, where excavations are continuing this summer, archaeological work has revealed the church dedicated in 685, and the main range of monastic buildings extend for about 165 feet parallel with the church. These seem to consist of a refectory perhaps with dormitory above, and a hall with a private suite attached. From the refectory another building runs south towards the river, and this is in course of excavation this season. Along the river are a range of less substantial buildings which have been near the workshops. One of these may have been originally a guest house which subsequently became a workshop for glass working.

The buildings in this monastery well illustrate Bede's statement that Benedict Biscop built in the Roman manner. The survival of Roman technical skills in the construction of the building, their decoration with painted plaster walls, lead roof, and coloured glass windows, have all provided valuable insight into the milieu in which Bede lived and taught. Some of the artifacts such as the magnificent coloured glass and the gold and painted pottery are close to parallel.

Within a generation the English had ceased to look to their continental teachers and had something to contribute themselves.

The material evidence which archaeology is currently providing for the "Golden Age" of Northumbria may be rather less spectacular than illuminated manuscripts such as the *Lindisfarne Gospels* or *Codex Amiatinus*, but it provides a context for the achievements of the great English settlers which well illustrates their wide contacts and the special fusion of cultures which made them distinctively Northumbrian.

The author is professor of archaeology at the University of Durham.

British scholars should play a bigger part in the new Europe

W. H. C. Frend calls for an end to our academic insularity within the Common Market

When Britain joined the Common Market in 1973 few would have thought that British scholarship would be affected as well as the nation's economics. Though I can speak only of arts, and more particularly of my own field of ecclesiastical and social history, what I have seen for myself may also be true for the sciences.

There has been first an enormous increase in the number of specialist learned conferences taking place in Europe during the last decade. There was a time not so long ago when an international gathering devoted to, say, Byzantine studies was a prestigious event which happened once every five years. Not so today. Every year sees intermediate colloquia, originally intended for small groups of specialists, but now every whit as large and highly organized as the parent congresses.

At Uppsala last year, a conference held by the Swedish *sous-commission* of the International Commission for the Comparative Study of Ecclesiastical History (CIHEC)—a branch of the mighty Congress of Historical Sciences—drew over 300 scholars from 35 countries including a considerable representation from the black African nations.

At Warsaw in June this year the pattern has been repeated. More than 400 scholars assembled in Warsaw University to discuss subjects ranging from the role of the churches in the Second World War to the transformation of society under the Christian empire in the fourth century. A scholar with European interests may find himself preparing papers or speeches for one such occasion but for four or five during an academic year.

The causes of course, are the explosion of knowledge in practically every section of arts scholarship, the proliferation of universities throughout Europe, and with that, the multiplication of research workers, particularly at the lower end of the academic ladder, seeking an outlet for their wares. In Eastern Europe, too, conferences can be a source of hard currency. In Poland everything in the reasonably comfortable state hotels is payable in dollars, partially refunded in duty for spending in the country.

The usefulness of these great gatherings may be open to question. Not all the communications delivered in a variety of languages, sometimes at a high speed, are real additions to knowledge. The main lectures tend to be platitudinous—though not always so. The proceedings take years to publish. Their value, however, lies in the chance they give for personal contacts between scholars working in related fields, and now, as a ship window for different countries to display national progress in academic research.

This last is now becoming an important consideration. Our continental partners, especially the French, have become aware of the value of the international learned conference as a means of projecting both their universities and the nation itself. Quite rightly and properly, the French dominated the recent Warsaw conference. They sent a large delegation led by their top scholars and these contributed valuably to each of the sections into which the conference was divided. They were subsidized by their national scientific societies and supported by their embassy, which gave a reception to all the French, with some Polish delegates and a dinner to the senior members of the party. The Italian, Dutch, West German and Spanish embassies acted similarly, and they were given good press coverage in their own countries.

The British were not represented either at the opening session, where the west European embassies were in evidence, nor was any official invitation extended to the British party. The question goes deeper than a "slip-up" or even of negligence. The issue is what part Britain is going to play in European scholarship in the new conditions of partnership and also rivalry with the other members of community.

If one's recent experience with the Warsaw conference was common, the outlook would be bleak. British scholarship would soon find itself pushed into the same corner of disregard that has befallen other aspects of national interest in EEC. Moreover, scholars from this country cannot be expected to be for ever ready to pay out considerable sums in transport and subsistence for the privilege of giving a two-minute address at the end of a long day to a bored audience, many of whose members know little or even no English.

The problem is lack of awareness of what is at stake, and consequent lack of organization. While Scotland lacks so much as an arts research council that could help channel funds and promote promising lines of research, some additional help must be sought from the British Academy itself. Though the recent establishment of yet another British Institute, this time at Amman is a matter for congratulation, it is clear that it has not understood the importance of Europe as a field where British scholarship must show itself to advantage. Its support for scholars wishing to attend European conferences has been relatively small.

The reasons are not easy to see. One suspects insularity. To be effective in a European setting, one needs to be able to argue a case at least in French and German. Few very senior British-born scholars have this facility. There is too, a reluctance to accept that European fields of historical study, particularly in the early period but also for Europe in World War II are really of interest to Britain. This is so much nonsense. It has been noticeable that no fellow of the British Academy has taken part in a CIHEC conference in Europe for 10 years. What is needed, is more European-minded directions of the academy and willingness to work with organizations in Britain that are concerned with European scholarly representation as of right. The present arrangements are not good enough.

The point of no return is still some way ahead. At present our scholarly reputation in Europe stands high. British work in that whole field of arts remains of world standing, but it is not projected as it should. The same obstacles are being made as in other fields of national endeavour. European conferences may be laborious, but there are worthwhile gatherings of scholars from all over the world may not prevent a war or an economic crisis, but they will certainly make the path of the diplomat marginally easier. They are a field where Britain has much to contribute—if it has the will to do so.

The author is professor of ecclesiastical history at Glasgow University and senior vice-president of the Commission Internationale pour l'Histoire Ecclesiastique Comparée (CIHEC).

BOOKS

Revolutionaries and the woman question

Women in Russia
Edited by Dorothy Atkinson, Alexander Dallin and Gail Warshofsky Lapidus
Harvester Press, £11.50
ISBN 0 85527 427 1

Our Women: living the revolution: an oral history of contemporary Cuba (Volume 2)
By Oscar Lewis, Ruth M. Lewis and Susan M. Rigdon
University of Illinois Press, £10.50
ISBN 0 252 00639 9

Women in British Trade Unions 1974-1976
By Norbert C. Soldon
Croom Helm and Macmillan, £12.00
ISBN 0 8476 6056 7

The Nineteenth-Century Woman: her cultural and physical world
Edited by Sara Delamont and Lorna Duffin
Croom Helm, £7.50
ISBN 0 85664 444 7

Women Take Issue: aspects of women's subordination
By The Women's Studies Group Centre for Contemporary Cultural Studies
Hutchinson, £6.50 and £3.25
ISBN 0 09 133600 7 and 133601 5

Historically, gender relations have never constituted the vanguard of any revolution, although they have often represented an afterthought. Where this has happened, it has not been women's minds but the political imaginations of men that conceived the elevation of women's status as an economically desirable goal.

Women's credentials for inclusion in revolutionary programmes have thus been those of their common human labour power, a characteristic they share, or must be socially engineered to share, with men. The claim to equality, as either morally appropriate or politically (economically) pragmatic, is constructed to conceal the obviousness of women's different biological endowment. The conflicts are not resolved, but present themselves as theoretical contradictions or practical dislocations during and after the event.

All these books in different ways are concerned with the reconciliation of woman's double productive nature "as worker and as mother. The issue can be seen on two levels: first, as the personal dilemma for women; second, as a political challenge to whole societies. In the latter case the conflict is presented rather differently—in terms of economic or social resources in order, for example, to boost female employment or protect motherhood. But in either case dealing with the dilemma means using culture to overcome nature, asserting the controlling superiority of "man" over the natural order. And yet this is the essential conundrication: for the generic term "man" includes women, and the cultural subjection of biology to social exigency invokes the constant reminder that through their reproductive power women remain "at one with nature".

This contradiction is concretely illustrated in the ebb and flow of Soviet policy on women and the family. *Women in Russia*, a collection of conference papers on the changing status of Russian women, follows the outline we already know as a political programme based on the theoretically derivative characteristics of sexual oppression in the state, schema, and of a post-revolutionary society which behaves like Jekyll and Hyde fashion towards the family, seeing it both as a source of sexual oppression and as a prophylactic against personal and social instability. The theory contrasts with the practice, for the fallen state of Marx and Engels to anchor the function of the family as female oppression solidly within their overanalytical grasp of capitalism exposed it as a theoretical anomaly. Norbert C. Meyer, writing about "Marxism and the Women's Movement" explores the place of women's liberation in the Marxist tradition and finds that both analytically and programmatically, the attitudes of Marx and Engels were characterized by "vague sympathy and unwillingness to deal with the problem intensively". He points out that this was partly because they had been satisfactorily dealt with both through their own analysis of women's oppression as implicated in, and therefore secondary to, class inequality, and because their friend August Bebel had already written a book (*Woman and Socialism*) about it. Meyer says that Bebel's book has been unjustly neglected, but he is unable to show that Bebel provides more than minor refinements to Marxist dogma.

Meyer also contends, with some temerity, that the private lives of Marx and Engels help to explain their inadequacies in confronting the "woman question". Marx was a Victorian patriarch who admired his father, adored his daughters (but wished they were sons), worshipped his wife, and slept with his domestic servant. Engels showed a similar sexual proclivity, but was not as outspokenly sexist as Marx, being more of a bohemian character.

Moving from private to public practices, Gail Warshofsky Lapidus examines "Sexual Equality in Soviet Policy". She demonstrates how the limited conception of sexual equality proposed by revolutionary socialism engulfed feminism *per se* and led to even more circumscribed notions of female liberation. From 1917 to 1930 the goal of mobilizing women as workers was at least combined with a degree of concern for the sexual democratization of political life; after 1930, with the abolition of the *Zhenotdel*—the Communist Party department devoted to women's work—liberation was increasingly equated with participation in a reserve army of labour, as economic expansion demanded the massive entry of women into social production.

Lapidus sums up the overall goal of Soviet family policy as increasing women's role in the labour force while leaving untouched their role as childbearers. Time-budget studies show how Russian women employed as workers are still involved in traditional domestic responsibilities, such as childcare work, home and husband-servicing work. But the falling birth rate is evidence of the great strain this double workload imposes. That fertility rates are highest among women who are least educated and whose labour force participation is lowest presents what must be, as Lapidus puts it, a very "delicate" political problem indeed.

The conundrum of this and other chapters of *Women in Russia* is that the conservatism of the Soviet regime towards women is a deeply entrenched and historically consistent attitude. There are chapters which show, for example, that occupational segregation by sex remained virtually unchanged from 1939 to 1970, and that the gender role images of children's school readers mirror precisely the same stereotypes of active, important male and passive, unimportant female, as in the West. One is left with the feeling that the lives of most women must be in some respects the same as before the revolution. They may be stripped of some of their economic and physical hardship, but are caught up both materially and ideologically in the same configuration of feminine concerns.

This is not unlike the conclusion conveyed by the most recent of Oscar Lewis's oral histories, *Four Women*, a portrait of the pre and post-revolutionary lives of four Cuban women. In the case of *Four Women*, however, such a conclusion was perhaps not part of the authors' intention, since the introduction sets out the project brief as illustrating the impact of the revolution on the personal lives of individuals. I must say that to me the book transmitted exactly the opposite: the autobiographies of the women—a domestic servant, a religious counter-revolutionary, a psychologist and an ex-prostitute—which make up the book seem to show consciously how tangentially political events and changes relate to the daily lives of Cuban women. This impression may be due to the editing: statements about the glorious nature of the revolution appear to interrupt the flow of personal testimony and bring the reader up against the political agenda of the book in an unwelcome and contrived way. It may also stem from the enduring poverty of urban working-class life in Cuba, ameliorated since the pre-revolutionary era certainly, but not yet eradicated. The third possibility is that the 1959 revolution has genuinely had much less impact on women than on men, and this possibility must be measured against the relevance of the revolutionary programme to the conditions of women's lives.

Unlike the Soviet regime, Castro's Cuba has never seen the liberation of women as a legitimate goal. The right to work, the moral necessity of engagement in social production, has instead been phrased as the *obligation* to labour—for the national good or for the sake of the revolution. The revolutionary government has seen women primarily as an untapped labour resource, and the aim of mobilizing women has been served through the government-run Federation of Cuban Women, headed by Vilma Espin, Castro's sister-in-law. Little challenge to conventional gender roles and stereotypes was presented in the course of this mobilization: country girls were brought to Havana and taught the "feminine arts" of cooking, sewing and nursing; prostitutes were groomed in respectable feminine behaviour; Castro made speeches about women's physical weakness compared to men, and pleaded for special "courtesies" towards them; occupational sex segregation was intensified with the reservation of particular occupations (for example, light work in textile factories) for women only. Moreover the drive to increase the proportion of employed women was only partially successful: the decade from 1958 to 1968 saw the percentage rise only from 14.2 to 15.6. The authors of *Four Women* blame this on the increasing difficulty of household management with the introduction of rationing and nationalization of services such as repair shops and laundries, the familiar obstacle of inadequate childcare facilities, and the combination of increased real income and a decreased supply of consumer goods making two jobs per family less of an economic urgency.

Perhaps it is not surprising, then, that the women who speak in this book have little consciousness of the way they as women are disadvantaged by femininity. By far the most recurrent themes concern the relationships between mothers and daughters and those between men and women. Both types are fraught by the fragility of love in a culture where women are overburdened with childbearing and childrearing, where men are bound with a corroding emotional intensity to their mothers, and where families have neither enough money nor enough space to develop the protective affection expected of them.

In one of the most memorable cameos in the book, Pilar Lopez Gonzales, an ex-prostitute, in a chapter called "It was all Mama's Fault" describes how she aided her mother in an unprocured abortion of a seven-month foetus. Pilar was nine at the time, one of five living children, and as the eldest in the house was summoned by her mother to help when the abortion failed to proceed. Her mother asked Pilar to put her hands inside her vagina and pull the foetus out since it seemed to be stuck. Pilar did so reluctantly and fearfully, and dragged out by the foot a dead, but otherwise apparently perfect, baby girl. She later goes on to recount her own numerous abortions, her relationships with men, her collusions with women against men, and her conflicts with, and about, her own daughters. Although she is eventually "rehabilitated" by a government programme for prostitutes and becomes an ardent devotee of revolutionary ideals, the veneer of recovery is thin and it is the unsolved problems of her life as a woman, as a daughter and as a mother, which continue to preoccupy her.

Academically and theoretically, the only sound basis for feminism is just such a literature of first-hand accounts, backed up by a statistical rubric against which their potential for generalization can be assessed. Norbert C. Soldon's book on *Women in British Trade Unions* falls into the latter category: it documents the statistical participation of women across a century of British trade union activity. For students of labour history it will probably fill some gaps, since before its publication the only available account of female trade union activity finished at 1921. But it is a pity that the data has to be packaged in such an unattractive form, Soldon's account lacking any theoretical understanding of the relationships between women's situation, trade union participation and functions, labour history, and women's liberation. It is also beset with terminological and ideological confusions: for instance the phrase "women's trade unions" is not interchangeable with "women in trade unions"; the passing of the Equal Pay Act does not mean the achievement of equal pay; and the phrase "feminine activism" makes nonsense of the necessary distinction between femininity—the cultural construction of womanhood—and feminism—the social project against it.

As the resource of research on women expands it is also to be hoped that new theoretical bridges will be built between statistics and first-hand accounts. Both *Women Take Issue* and *The Nineteenth-Century Woman* are attempts in this direction. Using an anthropological perspective, especially the work of Mary Douglas on social classification and pollution beliefs, the authors of *The Nineteenth-Century Woman* explore the interconnexions between femaleness and femininity in nineteenth-century culture. The invalidism of the Victorian middle class woman is the starting point of Lorna Duffin's analysis of medicine as an agent of social control: from studying the pages of *The Lancet* from 1850 to 1890 she concludes that the core medical attitude was an ambivalent one: women were either ill because they were women or because they were trying to avoid being women. Of course there was class distinction here as everywhere, summed up succinctly as the difference between middle class women who were inherently sick, and working class women who were simply sickening—a source of illness in others and/or of an inferior eugenic contribution to the future of the race.

One of the themes developed by Duffin and other contributors to *The Nineteenth Century Woman* is that in order to achieve progress in any sphere, women have had to translate their needs and goals into the language of the dominant masculine model, accepting masculine standards of behaviour and ideas. The emergence of women from femininity within a patriarchal culture has historically involved an emulation of masculinity—which is one among many things Freud was on about when he evolved his gender identity formulae in early twentieth-century Vienna. It is one aspect of women's situation that appears not to have occurred to Marx and Engels, and as a sweeping generalization one could say that a neglect of the ideological dimension of gender differences (or sexual inequality) has been the greatest obstacle to the communist realization of women's liberation.

Within the present feminist movement in the West, Marx has been the major theoretical resource, though Freud has recently joined him as a contender for the title. *Women Take Issue*, a collective product of the Birmingham Centre for Contemporary Cultural Studies, is an expression of idolatry to both.

Each piece—on such topics as the isolation of housewives, the culture of femininity among working-class girls, and in women's magazines, the politics of the women's liberation movement, and anthropological approaches to reproduction—roots its analysis in the conceptual armoury of Marxism, aiming to develop what in Marx is undeveloped—the precise relationship between the oppression of human beings within classes and the imprisonment of women in their sex. One piece, by Steve Burniston, Frank Mort and Christine Weedon, ambitiously takes on Marx and Freud together, in an interesting amplification of previous feminist work on psychoanalysis. These authors develop their belief that psychoanalysis is important because it offers a total analysis of the formulation of femininity within patriarchal culture, but insist that major transformations in the meaning of psychoanalytic concepts are called for. I found this chapter valuable, because it seems clear that a reworking of the psychoanalytic framework could be an important contribution to the theory of feminism. But it needs to engage more thoroughly with changes in the social context of gender identity development since Freud's time. I wonder also—and seriously, though I put the thought provocatively—whether some feminist should analyse the reasons for the psychological dependence feminists in general exhibit on the dicta of Marx and Freud? Is it only the "theoretical underdevelopment" of feminism that makes us place such a premium on what two dead patriarchs thought they knew about women?

Ann Oakley



Young ladies of the fourth class of the Smolnyi Institute in April, 1904, reproduced from Russia in Original Photographs, 1860-1920 by Marvin Lyons (Routledge & Kegan Paul, £9.50).

METHUEN

Nietzsche: Imagery and Thought
Edited by MALCOLM PASLEY

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BOOKS

Social archaeology

Medieval England: a social history and archaeology from the conquest to AD 1600
by Colin Platt
Routledge & Kegan Paul, £8.50
ISBN 0 7100 8815 9

Dr Platt's aim in this book is to relate medieval archeology to history and to improve the intelligibility of archeological sites by giving them an historical context. In order to achieve this, he decided that there were two possible treatments, the thematic (for example, "castle and manor house", "monastery and village") or the chronological. He has chosen the latter and has grouped his historical and archeological evidence to some extent within the orthodox framework of economic history.

Beginning with the Norman conquest, he moves on to the economic growth of the twelfth and thirteenth centuries, to the problems of fourteenth-century economic contraction with emphasis on the Black Death, to fifteenth-century stability and renewed growth in the sixteenth century. The treatment is not, however, consistent: archaeological themes sometimes float with little historical anchorage (for instance Norman castles and churches); the period from the twelfth to the fourteenth century has many citations from secondary works on social and economic history and there are patches of this in the sixteenth-century chapter. But the discussion of the fifteenth century is largely deprived of economic interpretation and mainly concentrates on descriptions of the standing buildings of the lay and ecclesiastical magnates and of the richer members of the gentry.

Although this work is named a "social history" this means little more than descriptions of aspects of material culture, with occasional concessions to "social mentality", such as late medieval attitudes to death. These are largely divorced from social relationships. Platt uses the word "peasant" frequently, and indeed there are useful descriptions drawn from archeological reports of types of village dwelling houses, especially of the fourteenth and fifteenth centuries. Inevitably, the material remains of aristocratic and ecclesiastical life are also described, photographed and drawn. But the role of the social classes and the relationships between them is never defined.

Platt's inability to analyse the medieval social structure and its dynamic is not a venial fault compensated by the archeological content of the work. It affects the usefulness of archeological data. Medieval peasant society, however much stratified, was based on the holding worked by a family labour force (with some servants); the artisan workshop in the town was based on family, apprentices and journeymen; the aristocratic household, however extended, had a definable composition. How much light, then, could be thrown on the social history of the main classes in town and country if the farm buildings, the workshops and the manorial complexes were systematically studied in the context of the numbers and relationships of the producers and of the productive processes in which they were engaged! This unfortunately is done, if at all, only in the most cursory fashion.

The choice of a chronological scheme may have much to do with the book's failure satisfactorily to be both a social history and an archaeology. Platt's anxiety to give full account of the work of archaeologists has led him to catalogue as many examples as possible of sites and structures. Consequently, the chronology is not only uneven but themes are emphasized not so much because they are of historical significance as because there happens to be a lot of archaeological material available.

If the author had more thoughtfully identified the most important themes in medieval social history and had carefully integrated the written and the archaeological evidence, he would have done his cause more good. As it is, the absence of any underlying concept of social structure and social development only throws into relief the hurried nature of this compilation. Given the excellence of many of the illustrations and the many valuable references to articles and reports in local archaeological journals, these weaknesses are much to be regretted.

R. H. Hilton

Rural life

Medieval England: rural society and economic change, 1086-1348
by Edward Miller and John Hatcher
Longmans, £8.95 and £4.95
ISBN 0 582 48218 6 and 48519 9

Any lecturer wanting to recommend a comprehensive introduction to medieval agrarian history faces an uninspiring choice. A is the old-dated; B is jolly and readable but a sort of book that tells the reader all about what peasants had for breakfast) but is rooted in changeless and arcadian interpretation of country life; C draws on a more alien orthodoxy, it attempts to dogmatize about the wickedness of landlords and the awfulness of the peasant's lot. Whom then can the student trust? For the new generation the answer will be this book, which is surely worthy of that special kind of distinction reserved for works known to us by their author's names. "Miller and Hatcher" now provides by far the best available history of English agrarian society from the Conquest to the Black Death.

It stands inevitably in a tradition of argument first established by Professor Postan. The main theme is the expansion of the agricultural economy, marked by an increase in population, cultivated land and production for the market, until around 1300 and its contraction during the subsequent half century, when economic decline gradually began to favour the tenant and labourer at the expense of the landlord. The main emphasis on inadequate investment as a cause of contraction differs slightly from that of Postan and is open to question. Given the impediments to technological innovation, could capital really have been used much more effectively to stimulate production? On the other hand, they may have underestimated the role of the money supply in determining the behaviour of the economy in general and of prices in particular.

The diversity of the agricultural scene marks a second theme for the authors combine an awareness of the wide variations in manorial structure, estate management, field systems and regional economies with an ability to generalize persuasively. Their "rural society" is not just peasant society. The discussion of the tenantry with insight and often with a new emphasis: peasants are treated as parishioners and villagers as well as mere suppliers of labour for the demesne. But some of the best chapters in the book deal with landlords. They give an excellent short account of the evolution of the gentry and show convincingly how landed enterprise contributed to the growth of a more commercial economy.

There are omissions. Of those on fashionable subjects, the history of the climate and of the family, the first is overlooked and the second considered mainly in terms of inheritance customs. One senses a conservative though understandable reluctance to tangle with *Le Roy Ladurie* and *Laslett*. Nor is enough said about the resilience of the peasantry under seigneurial pressure. The lords' increasing preference for wage labour was also made possible by its cheapness (*compulsory?*) but to the difficulty of imposing extra services and effective discipline upon recalcitrant and obstructive tenants. A less arbitrary lordship may have grown from the sharper definition of services during the thirteenth century, which in turn sprang from the growth of record-keeping. If the proliferation of court rolls, accounts, surveys and extents (about which little has been said) marked the lords' acute concern for profit, it also argued limited their claims on their subordinates.

These are points on which opinions may differ and they barely impair the value of this admirable book. Its bibliography and notes, drawn from an extraordinary wide range of manuscript and printed sources, are not the least of its merits. An article on demesne farming at Durham, cited on page 271, sounds ordinary enough—but who would have thought to find it in the pages of the *Nagoya Gakuin University Review*?

J. R. Maddicott

A crusading study

The Origin of the Idea of Crusade
by Carl Erdmann
translated by Marshall W. Baldwin and Walter Goffart
Princeton University Press, £19.10
ISBN 0 691 05251 4

Carl Erdmann has probably had more influence on crusading studies than any other historian of the past half century, and *Die Entstehung des Kreuzzugsgedankens*, now translated into English for the first time, has inspired, directly or indirectly, a remarkable series of works, in particular those by Villey, Rousset and Delaruelle.

All recent historians of the crusades, and also those of the eleventh-century reform movement and papacy, acknowledge a debt to it and the publication of the translation is a major event. Although the original version was published as long ago as 1935 it still reads as if it had been written yesterday. Of course certain points made by Erdmann have been modified and certain sources on which he relied have been rejected, but the book still bubbles with ideas.

Yet there is a case for saying that Erdmann's day is past and that the very prestige of this book (and the feeling that the subject has been treated definitively) now acts as an impediment to historians. For Erdmann's approach had defects and these may even be said to have invalidated his general conclusions. First, his definition of the term "crusade" was very unsatisfactory: for him a crusade was merely a war in which religious interests provided the specific cause. This definition was shown long ago to be far too general and, although it enabled Erdmann to extend the history of the crusades back before 1095, it led to a confusion of thought which is revealed in the book itself: it is not always clear to the reader whether Erdmann was following his own definition; he certainly contradicted himself by referring on one occasion to crusades as being aggressive and on another as being defensive. In fact the justifications of violence made before 1095 have to be carefully distinguished from apologias for the crusades if they are to be properly understood.

Secondly, Erdmann's definition of the crusade stemmed from an equally unsatisfactory definition of holy war as any war regarded as a religious act or in some way directly related to religion. Again, this was far too general a definition, being for practical purposes quite useless, even though it enabled him to take into consideration a number of doubtful eleventh-century examples. Thirdly, and most seriously, Erdmann assumed that around the year 1000 the Church's attitude to violence began substantially to change before that date there was ambiguity and also disapproval; in the eleventh century the Church adopted a much more positive approach to the use of force. But his examination of the period before 1000 was much too cursory to prove his point and one is left with the impression that he dismissed the earlier history of sacred violence because of certain preconceptions that he had.

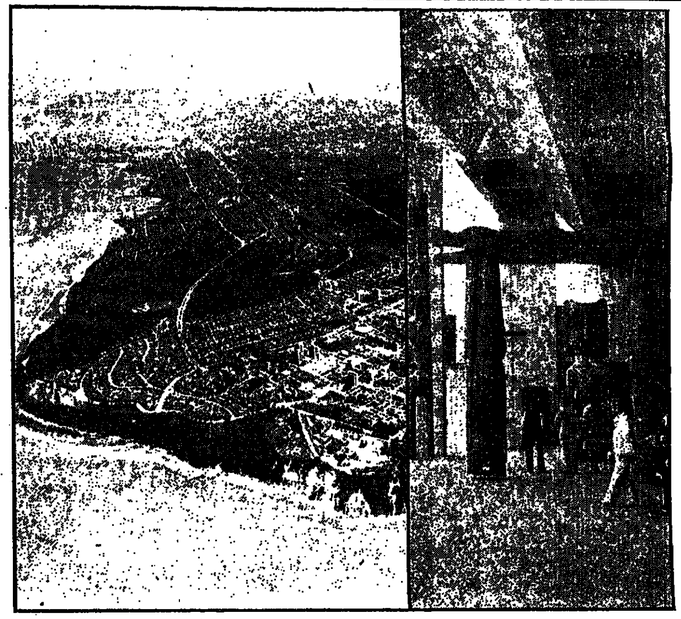
This great and brilliant book can still inspire and still points forward to untouched areas of research, but its conclusions should be treated with care. This translation, however, is better late than never, and one must add that it actually reads better than the original. It is provided with a useful and informative introduction and additional notes by Professor Baldwin, but four of the appendices to the original book have been left out.

Jonathan Riley-Smith

Commonwealth universities

A special report to mark the 12th Commonwealth Universities Congress

Sir Hugh Springer sets the scene for next week's congress



Aerial view of the University of British Columbia, the congress venue (left); and Anthropology Museum.

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Key role of the universities in a changing world

The occasion of this article is the twelfth congress of universities of the Commonwealth, to be held at the University of British Columbia in Vancouver from August 19 to 26. Almost inevitably one's thoughts return to the eleventh congress, which took place in Edinburgh in August, 1973. One recalls first of all the glorious weather, which Vancouver will no doubt equal, but can hardly improve on; then the excellence of the catering and the amenities, the splendour of the formal social occasions, and the many good talks with so many first-rate people from all parts of the world. Finally one remembers, with an effort, something of the programme discussions that were attended.

It was a sign of the times that for the first time the agenda included an outward looking topic (as distinct from the more domestic interests of university people), namely "The Problems of the Environment and the Universities". (When the congress programme was being prepared the Stockholm Conference was not far off.)

The other topics, not surprisingly, reflected some of the problems uppermost in the minds of university people at that time. Many had recently been severely jolted by the experience of student militancy (abetted by staff) of a kind previously unknown in modern times, except perhaps in Latin America. *And more recently staff attitudes had been in some instances at variance with the traditional conception of a university as an intellectual community.* The topic "Contemporary Culture and the Universities" provided an opportunity, among other things, to explore the causes of, and possible remedies for, these maladies.

The great postwar expansion of universities was financed by governments, and education as a whole had come even more firmly than before to be accepted as a government responsibility. Universities were conscious that in the postwar world they had become only a part of higher education as a whole, since higher education, regarded as a right of all who wished to claim it, would be too costly to finance if it all had to be provided through the universities. And any form of higher education was expensive compared with the other sectors. So the topic "Resources for Higher Education" was a timely one.

"Cooperation between Universities" and "The Government of Universities" were in the category of hardy perennials, especially popular since the year during the period of university multiplication when so many of the new foundations were in countries where no universities had existed before. Experience of university government was still in short supply and for this and many other reasons there was a continuing need for cooperation between the young and the weak. Indeed, before all universities the need for cooperation was felt to be perpetual. Soon after the congress came the oil crisis; and universities began to suffer the financial constraints which they still endure during the continuing world economic recession. For a time it seemed that Australia and Nigeria would be the exceptions in the Commonwealth to the general rule: they both were founding new universities in 1975. But, as it proved, the Australian flow was merely delayed, and in the case of Nigeria the founding of so many new universities was decided on for reasons of state and not because money was plentiful. In all Commonwealth countries the universities are having to make do on inadequate incomes, while the numbers of students continue to rise, though in Canada and Britain, for reasons of demography, enrolments are expected to fall in the 1980s.

Since universities everywhere are dependent for finance upon governments (whether central, as in the vast majority of cases, or provincial, as in the cases of the federal systems of Canada and India in their different ways) general financial stringency leads inevitably in the direction of greater government control and loss of university autonomy. Certainly it produces pressures on the universities, which they find it difficult if not impossible to resist, to follow policies towards which they may not be naturally inclined.

One such pressure is towards the rationalization of the "systems" of higher education. (If resources are scarce they must be used to the best advantage.) Thus in Australia the separate Universities Commission and Commission on Advanced Education have been superseded by a new Tertiary Education Commission assisted by a Universities Council and an Advanced Education Council; there is talk of introducing a similar arrangement in Britain.

Another pressure is to secure a reduction both in the number of non-nationals enrolled as students, whether by the differential increase of fees or by fixing an upper limit to the number of such students, as in Britain and some of the Canadian provinces, and in the number of non-nationals recruited as members of staff, as in some parts of Canada.

Independently of the economic crisis, political influences hostile to the universities were growing as a result of public reaction to political activism on the part of students and staff at a time when there was already the feeling that the universities were getting a disproportionately large slice of the educational cake. There was in fact a complete change from the mood of the late '50s and early '60s when, as a former Canadian university president put it, "universities were everybody's favourite instrument of advancement, not only of knowledge and understanding, but also of the public weal." University education seemed almost a species of magic, a universal panacea. . . "



Sir Hugh Springer

The choice of topics for the agenda of this year's congress reflects the concerns of university people in the middle '70s, when it is clear that the relative ease of operation in a period of continuous growth is over and that universities are no longer the favourites of the politicians or the public, some of whom would willingly take from university Peter to pay the Paul of other post-secondary institutions.

This time the congress will have a general theme, which will be opened up by Sir Charles Wilson in a keynote address — "Reconciling national, international and local roles of universities with the essential character of a university". Both in the general theme and the topics that follow indicate the view of the university as having an essential nature of accepted character and proven value, at the same time revealing the university's concern with world problems as well as those of its nation and its locality, and affirming the university's recognition of the importance of its relations with the public and with its educational neighbours.

Thus the first topic, the most outward looking one, is "The World Food Problem and the Universities". It will be introduced at the first plenary session by Sir John Crawford and later treated in group discussion under the four headings of production, population, energy and health.

The Commonwealth contains four of the world's most interesting federations, two well-established and two new—Canada, dating from the latter half of the nineteenth century, and Australia, from the beginning of this century, on the one hand, and, on the other, India, created between the wars, and Nigeria, created since the Second World War. The differences in their constitutional arrangements and stages of development are reflected in their university systems. These will be discussed under three heads: financial effects, student and staff mobility, and academic planning.

The spread of egalitarian ideas in recent years has challenged the ideals of excellence by which universities live, though the challenge is less sharp in Commonwealth countries than in some others; but it is enough to make it worthwhile, under the topic heading "Reconciling Equality and Excellence", to consider university standards, their international currency and how they affect the rest of education.

The choice of the topic "The Public View of the Universities" may be interpreted as a sign of awareness of recent political and public attitudes to universities. It embraces the relevance of the curriculum to the needs of society, the relevance of university training and research and direct services to industry.

Similarly the topic, "Universities and Other Institutions of Tertiary Education" implies recognition of the importance of these institutions in today's world and of the need to establish constructive relations between them and the universities for the benefit of the community.

The Edinburgh congress attracted an attendance of a thousand souls. A similar number is expected at Vancouver—rather more in fact though it is difficult to be precise at the time of writing. The response has been very encouraging in view of the financial difficulties faced by all our member universities, but no more encouraging than the fact that during the past five years the membership of the association has grown a good deal more than in the previous quinquennium, having moved from 191 members at Edinburgh to 221 now. It is a matter for some satisfaction and it encourages the thought that the services the association provides are appreciated by its members.

A congress is an important event in the life of the association—indeed a necessary one; it may almost be said to *be* the life of the association, in the sense that it is at such gatherings that the reality of the association is brought vividly home to the representatives of its member institutions who attend. No other activity of the association can produce this consciousness, or, if it can, not to the same degree.

Overall responsibility for the congress rests with the Congress Organizing Committee under the chairmanship of Dr Steven Watson. However, the staging of a congress in a country other than the one in which the association's management resides is possible only with the wholehearted support and efficient organization of those on the spot. On this occasion, the association has had the splendid backing of the Canadian universities; and the Canadian Committee under the leadership first of Dr Carl Williams and then of Dr Harry Duckworth as well as the local committee of the Universities of British Columbia under the leadership of Dr Erich Vogt have worked with efficiency and zeal and earned the grateful thanks of the association.

Sir Hugh Springer is secretary general, the Association of Commonwealth Universities.

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When the piper wants to call all the campus tunes

As Australian educationists wait for the Williams Report's proposals for the development of the tertiary sector to the year 2000, Frank Hambly looks at the increasing involvement of the central government in academic affairs

There is a continuing open season in Australian tertiary education. At least, that's the conclusion which might well be drawn from the intrusive actions taken by governments and the views expressed by pundits in print and on the air over the past few years.

Australia has a federal constitution under which each state is empowered to act in the whole field of education. Yet, because revenue-raising has been extensively ceded to the Commonwealth (federal) government, the states have virtually abandoned the onerous duty of financing much of tertiary education and effective authority has inexorably moved to Canberra. Since tuition fees have also been abolished, nearly all funding is now dependent on the decisions of the federal government.

Tertiary education in Australia comprises three sectors: universities, colleges of advanced education (colleges) and technical and further education (TAFE). Before June, 1977, separate education commissions for each advised governments on the level of financial assistance that should be provided ; but, because they were largely self-contained, development of tertiary education was judged to be inadequately coordinated.

The government, therefore established a Tertiary Education Commission (TEC) with subsidiary advisory councils for each sector, to develop and recommend policies as the basis of financial support for all Australian tertiary institutions, and to coordinate the whole of tertiary education. Professor Peter Karmel, chairman of the earlier Universities' Commission, became the head of the new "overlord" body, the primary duty of which was to rationalize the functions of the three sectors.

Established in 1965, the colleges were intended to be different from universities, to concentrate on professional and vocational training and to have no significant research role. It has not, in fact, been possible to achieve such a distinction, for some colleges have sought to emulate universities and a few universities have tenaciously clung to college functions. There is a similar blurring at the edges of advanced and technical education.

For all institutions of tertiary education, the policy of rationalization brought about a change in the federal government's decision making. Whereas, for example, the former Universities' Commission advised the Minister for Education direct, the new system requires that proposals on university finances, and therefore on policy ultimately, have to pass through several sieves of governmental bureaucracy—advisory councils, a coordinating commission and official committees of public (civil) servants—before formal decisions are taken.

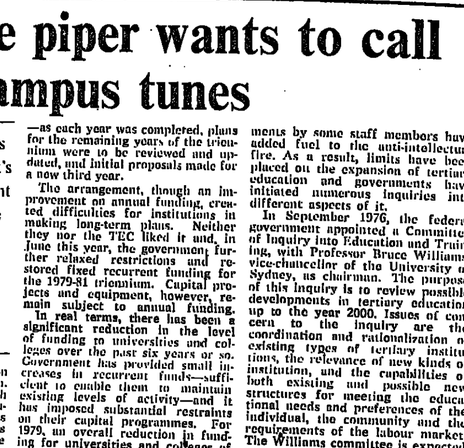
The process increases the opportunity for "outsiders" to pronounce on the policies of universities, and their powers are enhanced by guidelines on funding which effectively set limits to the TEC's freedom of action. None would deny that the piper must be paid but, increasingly, he alone is coming to select the tune.

Along with these changes in the political direction of tertiary education came new instruments of control in the funding of institutions. Until 1975, funds were provided by Parliament on a triennial basis but, in that year, the government tightened the rein on public expenditure generally and in respect of tertiary education funding committed itself for one year only. This most restrictive policy was modified in 1976 by the reinstatement of triennial programming on a "rolling" basis—as each year was completed, plans for the remaining years of the triennium were to be reviewed and updated, and initial proposals made for a new third year.

The arrangement, though an improvement on annual funding, created difficulties for institutions in making long-term plans. Neither they nor the TEC liked it and, in June this year, the government further relaxed restrictions and restored fixed recurrent funding for the 1979-81 triennium. Capital projects and equipment, however, remain subject to annual funding.

In real terms, there has been a significant reduction in the level of funding to universities and colleges over the past six years or so. Government has provided small increases in recurrent funds—sufficient to enable them to maintain existing levels of activity—and it has imposed substantial restraints on their capital programmes. For 1979, an overall reduction in funding for universities and colleges of 2.5 per cent on 1978 has been announced. On the other hand, the funding for TAFE has been increased by 19 per cent in 1979, a decision which no one begrudges.

While it is now accepted that the days of university and college expansion in the 1960s and early 1970s had to end, the present policies seem to indicate little prospect even of modest development and improvement, and this will create problems, especially for newly-established institutions such as Griffith, Murdoch and Deakin universities.



Professor Williams: looks to 2000.



The library colonnade, Macquarie University.

Why have governments sought to exercise increased control? Much of the development in tertiary education over the past 10 years has been uncoordinated. With a downturn in the Australian economy, increasing inflation, evidence of a decline in the rate of population growth and growing unemployment —including some among graduates —it was felt perhaps that there was surplus capacity in tertiary education.

Also, there have been periodic bursts of public criticism to the effect that the tertiary education system has been allowed to grow too fast and unchecked, that the institutions and their staff members enjoy privileges not available to other sections of the community, and that because too many places are available, mediocre students are being admitted.

While much of the criticism has been ill-informed and unjustified, some of it has stuck. Certain student activities and actions and statements by some staff members have added fuel to the anti-intellectual fire. As a result, limits have been placed on the expansion of tertiary education and governments have initiated numerous inquiries into different aspects of it.

In September 1976, the federal government appointed a Committee of Inquiry into Education and Training, with Professor Bruce Williams, vice-chancellor of the University of Sydney, as chairman. The purpose of this inquiry is to review possible developments in tertiary education up to the year 2000. Issues of concern to the inquiry are the coordination and rationalization of existing types of tertiary institutions, the relevance of new kinds of institution, and the capabilities of both existing and possible new structures for meeting the educational needs and preferences of the individual, the community and the requirements of the labour market. The Williams committee is expected to report this month.

Five state governments—all except Queensland—have also conducted inquiries with the aim of rationalizing the development of tertiary education, and all have established coordinating bodies to oversee its development. While the colleges and TAFE institutions have always been subject to a degree of state government control, universities have previously dealt directly with the TEC ; the state governments' decisions have not been welcomed by them.

Despite restrictions placed on the growth of existing institutions, the federal government is nevertheless establishing two more. First, the Australian Maritime College in Launceston, Tasmania, will open in 1980 to provide marine education and professional training courses for the maritime, fishing and associated industries. Second, the government has announced its intention to establish Casey University—Australian Defence Force Academy in Canberra, to provide education at tertiary level for officer cadets of the three Australian services. It will replace three single-service cadet colleges, each of which is attached to a university.

Strong objections have been raised, however, to the establishment of Casey University: some academics have objected to the cost at a time when other tertiary institutions are being squeezed, and some service personnel believe that officers of the three services should continue to be trained separately. The future of Casey University is uncertain.

The terms and conditions of employment of teaching staff in universities and colleges are coming under close scrutiny. Because institutions have stopped growing, many have introduced fixed term appointments to give themselves a degree of flexibility in staffing. Such appointments are in the best interests of the institutions, but not always of staff members, and staff associations look on them with disfavour. There has also been criticism of the system for academic staff.

But the most significant protests against staff conditions have been the federal government's refusal to the TEC to finance study leave. In general, academic staff in universities and colleges are entitled to apply for one year's study leave after six years' service. This is usually granted by many as an unwarranted privilege. This May the TEC issued its draft report on study leave for comment, and later it will issue its final report to the government. The draft report proposes a significant curtailment to study leave schemes, and has generated considerable public interest.

Another staffing issue affecting universities and colleges is the ban from moves by trade unions to obtain national awards on the subject of ment conditions for non-academic staff. To date, such staff have generally worked under state government awards and the outcome of negotiations with the trade unions are costing the institutions dearly in both time and money: it is likely to be some years before the issues are resolved.

There has also been government action in respect of students' activities. Despite the absence of tuition fees, the level of the government grants available to assist students have not kept pace with inflation, and many claim to be in financial difficulties. An inquiry in 1977, this time into the desirability and feasibility of introducing a students' loans scheme, found so far come to nothing. Students are anxiously awaiting the Budget this month to learn if there will be increases in their allowances for 1979.

For some time, governments have been concerned about the compulsory membership of student organizations in universities and colleges, and with the appropriation of funds by these organizations for non-institutional activities. In particular, the left-wing Australian Union of Students (AUS) has attracted critical attention.

The federal government has recently announced that it intends to legislate to abolish compulsory membership of student bodies at the Australian National University and the Canberra College of Advanced Education—the two institutions which come directly under its control. The state governments of Victoria and Western Australia have already taken similar action in respect of the tertiary institutions in their states, and Mr Malcolm Fraser, the Prime Minister, has written to other state premiers suggesting that they enact similar legislation. Such action could seriously inhibit student activities, particularly by the AUS. This episode has still to be played out.

Frank Hambly is secretary, Australian Vice-Chancellors' Committee.



Lagos : mixture of traditional and modern.

Tight controls accompany big expansion of provision

J. F. A. Ajayi and Segun Adesina on the dramatic growth of Nigerian higher education since independence

The pace at which university education has grown in Nigeria since political independence is unparalleled elsewhere among the new African nations. On the eve of independence Nigeria had only one university in full operation, at Ibadan, while a second one at Nsukka had just been opened. The turning point came in October, 1960, with the publication of the Ashby Report which recommended two additional universities (Lagos and Zaria) and suggested an undergraduate enrolment of 7,500 by 1970. The figures both for new universities and student enrolment targets have since had to be revised dramatically upwards by the federal government.

By 1973, there were six universities : Ibadan, University of Nigeria at Nsukka, Ahmadu Bello University in Zaria, Lagos, Ife and Benin.

Lagos and Ibadan were financed fully by the federal government *while the others*, established at the *insurance* of regional governments, received varying proportions of federal aid. Two years later, after pressure from states without universities, the federal government assumed responsibility for all existing universities and established seven more, four full universities and three autonomous university colleges which were soon recognized as independent universities.

Apart from those 13 universities which award degrees at undergraduate and postgraduate levels, there are also polytechnics, colleges of arts and science and colleges of technology which aim at providing middle-level manpower in various professional and technical fields. There are, too, advanced teacher training colleges and colleges of education which aim at producing qualified non-graduate teachers. The intention is that with the cooperation of the federal and state governments, there should be at least one college of technology or polytechnic and one college of education in each of the 19 states of the federation.

The implications of the increase in the number of institutions of higher education are far-reaching. Perhaps the most remarkable is the sharp increase in the student enrolments, particularly in the past five years. To take the universities alone, at independence there were 1,399 students in the two universities (1,136 at Ibadan and 263 at Nsukka). By 1973, enrolment in the six universities had risen to 25,900. The target is that by 1980 the undergraduate population in the 13 Nigerian universities should rise to 53,000.

There is little doubt that this target will be exceeded, since enrolment is already close to 50,000. That is to say, between 1973 and 1978 enrolment has nearly doubled, representing an annual growth rate close to 20 per cent. Yet, in relative terms, by 1978, for every 1,600 people, there was only one university student. With the uneven distribution of the student population, the ratio in the northern parts of the country was much lower. Students in the different types of institutions of higher learning who now number over 100,000 have constituted a significant body of organized youthful opinion demanding to be listened to and taken seriously.

The diversification of higher education institutions has led to increased pressure to diversify also the contents of higher education.

Efforts are being made by individual universities not only to increase the range of their fields of study but also to open up more areas of specialization. For example, faculties of education which remained monolithic for a long time have been departmentalized so as to emphasize areas of specialization like planning, guidance and counselling, adult education, curriculum studies, teacher education and so on. Faculties of law have established such departments as commercial and industrial law, international law and jurisprudence, public law, private and property law. Faculties of engineering, agriculture and medicine are increasingly emphasizing specific areas of specialization within the broad fields of study. This enables different universities to emphasize different specializations and to embark more seriously on post-graduate studies.

Concomitant with the rise in student enrolments has been the increase in female undergraduate population. In 1959, when there was one university with a student population of 967, only 68 female students were enrolled—7 per cent of the total. Even in 1970, when the university student population stood at 14,531, only 692 female students or a little less than 5 per cent were enrolled. Inequalities in enrolments on the basis of sex have since been considerably reduced. In 1972 female undergraduate enrolment rose to 15 per cent and today female university students constitute nearly one-quarter of the undergraduate student population.

The rapid growth in the number of institutions and students meant a large-scale demand for good academic and administrative staff. This demand became particularly serious in 1975 when the seven additional universities were created. To compound the problem further, there were political pressures at the same time that top positions in both the private and the public sectors of the economy should be "Nigerianized" ; and the industrial and commercial houses were willing and able to pay higher salaries than the universities.

One way of meeting this challenge was to raise the staff/student ratio. This had tended to be rather low in the earlier years of the universities. As late as 1972-73, the staff/student ratio for Nsukka was 1:8.8, Ibadan 1:8, Ife 1:7, Lagos 1:6, ABU 1:6, and Benin 1:5. The policy since 1975 has been to achieve an overall ratio 1:10, with lower ratios in medicine, engineering, environmental design, science and technology, and much higher ratios in the social sciences, education and the humanities. Even then, it was necessary to supplement available staff in Nigeria with the recruitment of teachers from abroad.

In fact, in the earlier years the universities relied heavily on overseas recruitment. Through a vigorous policy of staff development and local postgraduate training, the proportion of expatriate teachers was gradually reduced. An investigation in 1975 revealed that the percentage of expatriate staff in the older universities was 16.4 in Lagos, 12.9 in Nsukka, 26.7 in Benin, 23.2 in Ife, 22.5 in Ibadan and 50.1 in Ahmadu Bello University. It seemed likely that the newer universities will start with expatriate staff higher than these and might even reverse the trend in some of the older universities as well. An estimate in 1977 indicated that 2,500 new academic staff would be needed in all the universities up till 1982.

It cannot be expected that Nigerian universities would or can produce this number of teachers by themselves even through the boldest of post-graduate programmes. Well-qualified expatriate teachers will therefore remain a significant part of the staff of the universities for the next decade at least.

Any assessment of the recent developments in higher education in Nigeria cannot overlook the increasing federal involvement financially and otherwise in the governance of these institutions. It is at the university level that the federal financial contribution has been most significant, amounting to N51m in capital development in the Second Plan while the states were expected to contribute N32m, representing a federal involvement of 61.4 per cent. In the current Third National Development Plan federal capital financial involvement increased tremendously to N208.92m or 82.9 per cent of the total amount earmarked between 1975-80.

Those amounts turned out to be grossly under-estimated, particularly with the establishment of the new universities in 1975. And in June, 1978, the federal government announced N427m for the capital development of the universities for the rest of the plan period alone.

Federal control of the universities has been expressed in other ways. The National Universities Commission, which started in 1962 merely as a body to coordinate the activities of the universities, was reconstituted and given wider powers in 1974. Control of admissions has been virtually taken away from the universities through the establishment of the Joint Admission and Matriculation Board (JAMB), an independent government-sponsored body with university representatives. This has been accompanied by the abolition of tuition fees for Nigerian undergraduates and severe cuts in the level of federal government subventions.

The fight financial situation does not merely challenge the universities to greater economy ; they also encourage stricter control by government and the NUC over university initiatives in determining the priorities in academic development. Government is demanding not merely increases in the production of high-level manpower, but also larger proportions in the areas of science and technology, more even distribution throughout the country and greater commitment to specific national goals.

J. F. A. Ajayi is vice-chancellor, Lagos University ; Segun Adesina is acting head, department of educational planning and administration, Lagos University.

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The Caribbean: changing needs in a changing society

A. Z. Preston, vice-chancellor of the University of the West Indies, looks at the ways the Commonwealth Caribbean's campuses are serving their communities.

Recent developments in higher education in the Commonwealth Caribbean must be seen within the changing context of the Caribbean itself. The Independence movement of the sixties, which ended the federal experiment, brought nationhood to the larger territories—Jamaica, Trinidad and Tobago, Guyana, Barbados, and, later on, two of the smaller territories, the Bahamas and Grenada. The other territories, Antigua, Dominica, Montserrat, St. Kitts-Nevis—Anguilla, St. Lucia, St. Vincent, Belize, Cayman Island and British Virgin Islands were in various stages of progress towards this ultimate goal.

As the territories of the Commonwealth Caribbean set out to create and re-define individual national goals and objectives, education has inveriably been recognized as a key strategy for social and economic development. This is particularly manifest in the field of higher education which has undergone a significant shift in concept and content over the past decade.

Higher education is no longer regarded as the preserve of an intellectual elite relating exclusively to the academic world. Indeed, the concept has broadened to embrace the provision of skills in terms of the manpower needs of the Caribbean area. As such, there is an escalating demand for other types of training which are being offered in a multiplicity of tertiary institutions — vocational, professional, polytechnical, cultural, community and junior colleges of all varieties —and which fill a genuine educational need bridging the gap between secondary and university education.

The phenomenal development of higher education is particularly evident at the university level. The region is served by two universities: the University of the West Indies founded in 1948, and the University of Guyana established in 1963. With a population approaching five million and an age distribution which is highly skewed towards the young (figures indicate that in 1970 some 53 per cent of the population was under the age of 19), education, and particularly higher education, is at a premium.

The University of the West Indies has so far produced some 10,000 graduates, and about 1 per cent of the labour force are university graduates. In no other single institution have the trends of expansion and innovation been more evident than in the University of the West Indies, which has retained its regional character, serving the 14 contributing territories of the English-Speaking Caribbean, and providing services for Guyana in the fields of law and medicine.

The decentralization of the university with the establishment of campuses at St Augustine, Trinidad and at Cave Hill in Barbados, together with the concomitant restructuring which has been taking place, is part of the strategy designed to take account of the new social, political and economic realities of the region. This is an on-going exercise directed towards establishing maximum autonomy for the individual campuses, while maintaining the cohesion required to sustain a viable regional character. At the same time, mounting pressure with respect to the needs of the non-campus territories has resulted in the establishment of university centres in some of these territories, with educational programmes directed by the university's extra-mural department.

The second important development in recent years has been a massive re-orientation in the scope and content of academic activity, with a deliberate thrust towards providing a more relevant and practical education for the region, without detriment to the university's unique function and without sacrifice to scholarship.

New emphases are being applied to the technological and other developments in the area. For example, in the faculty of medicine special programmes in community medicine are being developed, reflecting a more comprehensive approach to the health needs of the area. Increasing concern for the scientific development of the region has led to considerable expansion in the faculties of agriculture and engineering. New courses have been designed for tourism and hotel management and business management, with a strong focus on applied research.

The academic structure is constantly being made more flexible, not only offering regular degrees, but diploma and certificate courses as well. Parallel to these developments has been the introduction of part-time and evening registration. In fact, the university, which began as a residential institution, now accommodates less than one-third of its student body in its halls of residence.

The average per capita cost per student in the faculty of medicine was US$5,661 in 1971. In 1977 the figure had risen to US$12,666, an increase of 123 per cent. In natural sciences the average per capital cost increased by 176.8 per cent during that period, rising from US$1,593 to US$4,410; while in the faculty of arts and general studies it was costing US$1,268 to train a student in 1971, which rose to US$3,256 within six years. The problem is clearly illustrated by the relationship between the average per capita cost of university education and per capital income. In Jamaica, for example, during the period 1973-76, the ratio of per capita cost and per capita income rose by 17 per cent.

It is, therefore, becoming most difficult for many of the contributing territories to provide funding for the university in proportion to the demand for higher education. In some cases, the problem is further aggravated by devaluation variables.

The university has, of course, benefited vastly by funding from various overseas sources. The governments of the United Kingdom, Canada and the United States have been extremely generous in providing capital funding, and a considerable number of special research and training programmes have been initiated and sustained through financial assistance from such agencies as CIDA, USAID, ODA, UNDP, UNESCO and CFTC, and from private foundations such as Ford, Rockefeller, Carnegie and Nuffield.

Current expansion in the faculty of engineering, for example, is being assisted by a grant of Can$1.5m from CIDA, and final approval is being awaited for an allocation of 3m Units of Account from EEC funds to the University of the West Indies. Without some measure of external aid, much of the expansion referred to could not have been carried out.

The University of Guyana has experienced a similar pattern of growth since its creation. It was established in April 1963 as a result of an earlier decision by the government of Guyana to cease being a participant in the University of the West Indies. Formal inaugurations took place in October, 1963, at Queen's College, Georgetown, when classes for the first 164 students began. Six years later the university moved to its new campus at Turkeyen.

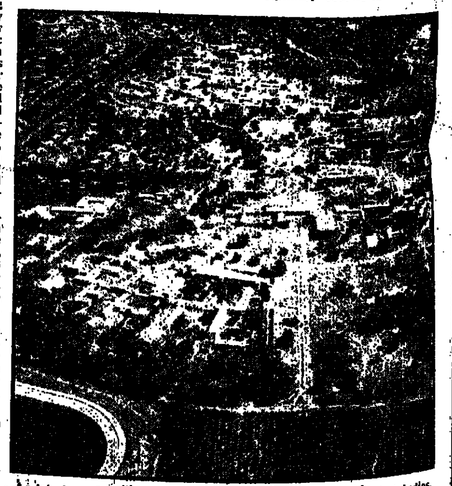
Initially, only general degree programmes were offered in the arts, social sciences and natural sciences. Since then the University of Guyana has expanded to five faculties, including a faculty of technology. The rise in enrolment has also been significant. In 1968/69 the university had just over 700 students. Within two years the number had risen to 1,234 and the 1976 enrolment stood at nearly 2,500 students.

The University of Guyana has set its priorities in terms of greater contribution to national development and recognizes its shortage of science-based graduates, which is a common problem in the Caribbean area. To redress the imbalance effectively, the process must, of course, begin at the secondary school level where science teaching has to be considerably upgraded to provide a sound basis for the tertiary systems, the rate of which is determined largely by available funds.

Considerable strides have, however, been made in developing tertiary institutions below university level. There are now well over 5 institutions throughout the Commonwealth Caribbean (not including teacher training colleges) which offer a wide variety of training courses at different levels. In Jamaica, for example, 9,000 students are registered for some kind of "continuing" or higher education outside of the university system with a view to producing the professional, semi-professional, technical and middle level skills needed to service the public and private sector.

In this regard the College of Arts, Science and Technology has taken the lead. Established in 1958, and beginning with some 50 students and four courses, CAST now has an enrollment of over 3,400 students (full and part-time) and offers 60 different courses in seven broad areas. The areas of training provided by the institute lie between the craftsman and the professional and students have the option to end their studies at different levels of attainment or specialization.

The Jamaica School of Agriculture is also rapidly expanding and now includes in its options animal husbandry, agronomy, home economics and natural sciences. In the fine arts, the Cultural Training Centre, an amalgamation of the Schools of Music, Drama, Arts and Crafts and Dance, provides multi-disciplinary courses in these fields.



Aerial view of the main campus of the University of the West Indies.

Britain: fewer students is the challenge of the 1990s

by J. Steven Watson

The topic with which the Commonwealth discussions will open, in Vancouver will seem to British vice-chancellors the greatest possible contrast to the niggling discussions at home which have lately exercised them. For the committees in Canada will tackle the world problems of food and population. They face, as Professor Musangi of Kenya puts it, "the provision of adequate diets for a rapidly expanding population". With that problem, alas, complicated by the using up of raw materials and by rising energy costs, we are accustomed to live.

In Britain recently the academic community has allowed a new problem to pre-occupy it, remote indeed from that of developing areas. It is quite simply the struggle to maintain high standards of university scholarship in a country with an economy afflicted with obsolescence and with an adolescent population about to decline sharply. As the consumer demand changes can British academic traditions, which are respected all over the Commonwealth, fare better than those of British industry which were once the pattern for the world?

Ever since the Robbins report British universities have lived in an atmosphere of growth. This growth has proceeded upon the principle that higher education should be provided from public funds for all those who, at the end of their secondary education, have qualified to go on and who, from their attitude of mind, could profit by doing so.

By following this rule higher education activities as a whole have tripled in size. In part the increase has been due to a greater percentage of the 18-year-old population seeking such education. In 1960 only 7 per cent of the age group participated. By 1970 it was around 13 per cent. But since 1974 this figure, which is not high by comparison with other advanced European countries, has not risen.

Throughout the period the proportion of the sons, and even more the daughters, attracted from households new to university experience has remained disappointing. The continued expansion of the 1970s has, in these circumstances, been sustained by population growth. The increase in the number of 18-year-olds will continue until the middle 1980s. It will then steady and quickly thereafter decline.

The government and the primary schools seemed surprised when this demographic fact affected preparatory education. But in the case of higher education the Department of Education and Science, through its document *Higher Education into the 1990s*, has taken all academics into consultation in good time. We have had our chance to comment on the five models set out in the document and we have all attempted to answer 14 specific policy questions spread before us. For organizing so widespread a debate the government deserves the praise it has received.

While applauding the initiative, the universities have, however, been critical of several approaches in the discussion document. It has not escaped notice that their future has been considered almost entirely in terms of first degree work. Should staff and buildings be provided to meet a short-term rising demand knowing that this may later lead to redundancy or unused capacity? Should we make university entry harder for 19 years? Should we make university teachers work even longer hours and give less personal care? Or should we rather aim to increase the percentage of a shrinking age group interested in going to university? Or should we bring in mature students for retraining in the 1990s and so fill the classrooms provided for juniors?

In all these considerations there is a neglect of the research aspect of a university and of issues to be discussed under Heads 3 and 4 in Vancouver. The thirst for new ideas keeps all our teaching lively. The discovery of new knowledge may well be the only way an ancient community can survive in a competitive world. In Britain we are unfortunately accustomed to public forgetfulness of postgraduate work. Research councils have tighter budgets. Inflation destroys some private benefactions.

Yet it would seem obvious that a shrinking population needs increasingly sophisticated wits if it is to live off them. Unless leadership in some areas is retained, as well as know-how, we are likely to be caught in a vicious circle of contraction. The vice-chancellor of Aberdeen will be able to show, with chapter and verse, that even all discoveries require research and teaching to produce their full benefits to the community.

Another feature of recent discussion which disturbs British universities is the treatment given to recruitment from overseas. It may well be that Chairman Irvine of Guyana may have to protect us from Commonwealth criticism as an Irish sub-group had to shield us in European discussion of the international mobility of students.

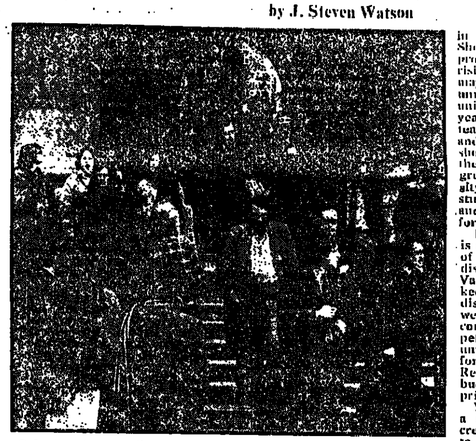
Fees are up and are differential. The University Grants Committee attempts to implement a ministerial policy of reducing the proportion of overseas students. This might be understood in the present period of our own rising demand. But the projections made in London anticipate lowering the number of overseas entrants down below present levels even in the period of possible spare capacity after 1990.

No doubt it will be argued that a poor country cannot afford to help educate those who pay fees elsewhere. But a reply will be that this is a false economy. The unseen but practical advantages of helping developing university systems, some in rich countries some in poor, are not inconsiderable.

Perhaps, however, this is an argument about style and purpose rather than around a balance sheet. Many in British universities feel that the nature of a university is lost unless it remains an international institution. Some believe it more important to offer central seminars to the Commonwealth than it ever was to act as the workshop of the world.

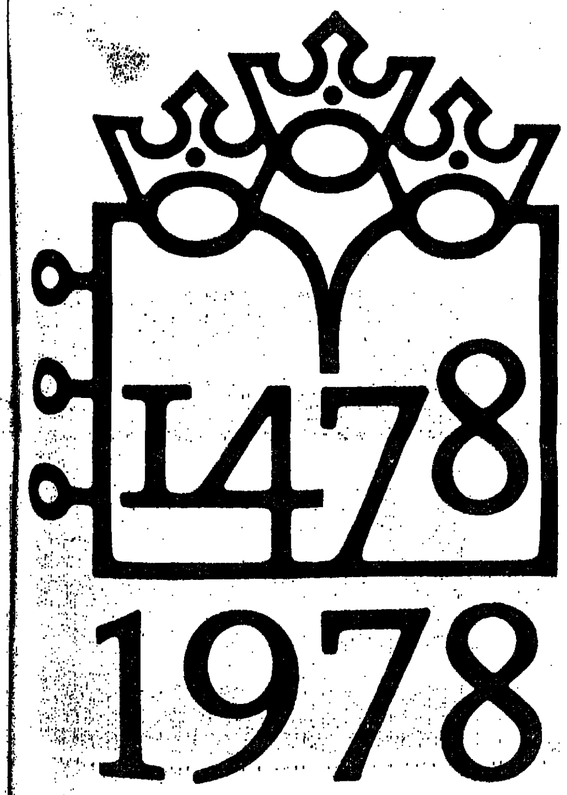
Such sentiments reflect British academic pride. Recently, salary negotiations and threats of union interference with examinations have revealed, on the other hand, a feeling akin to persecution. In government consideration of salary levels increases in teaching efficiency were ruled out as irrelevant and no productivity bargain was attempted. British university teachers feel they have been too willing too soon. "Let us take on the extra job", they have said, "and they will surely give us the tools".

This has resulted in disappointment and a growing sense of being neglected by those who only appreciate a muscular argument. Certainly, the worth to the country of these minds trained in research would be at once appreciated if the academic community were unable, by worsening conditions, to undertake the multitude of public services which are now taken for granted.



Oxford students: a disappearing breed?

J. Steven Watson is principal and vice-chancellor, St Andrews University, and chairman of the congress organizing committee.



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Sense of unease pervades mixed

Developments in higher education in Canada during the past five years include slowed enrolment growth, collective bargaining and strikes by university teachers, financial restraint, termination of federal-provincial cost sharing, tightening of controls by provincial governments, introduction of programmes and units for instructional development, more provision for distance education, the beginnings of a national science policy and major moves toward the francization and independence of the province of Quebec.

Since the early 1960s the number of young people between 18 and 24 has been rising, and the proportion of them entering higher education increasing. The result has been rapid growth in the enrolment of full-time students in the universities and, in the past 10 years, in the new networks of community colleges. From 1967 to 1972 full-time enrolment in universities rose by 27 per cent; between 1972 and 1977 the figure was 16 per cent. For non-university institutions of post-secondary education the percentages were 93 (they were new then) and 29.

Population projections indicate that the number in the 18 to 24 group will peak in 1982, then decline by 1995 to the 1970 level, and by the end of the century will have climbed again only to equal the numbers in 1973. Age-participation rates seem to have stabilized, although they are unpredictable.

The universities, and to a lesser extent the colleges, are already in a state of no growth, and face the prospect of decline.

Surveys undertaken by Statistics Canada in 1968-69 and 1974-75 showed that over that period participation by students from the lower socio-economic groups had changed little in the universities but had improved somewhat in the community colleges. These groups remained under-represented in both types of institution.

Edward Sheffield charts the wide-ranging changes in Canadian post-compulsory education over the past five years.

Census data for 1976 revealed that of the population 15 years of age and over, 16.1 per cent had some university education as compared with 10.8 per cent in 1971. The proportion of the out-of-school population with a Bachelor's degree rose from 2.4 to 4.6 per cent in those five years.

In recent years graduates have found it increasingly difficult to get employment, or at any rate employment related to their preparation. One immediate result has been that students are more interested in career-oriented courses, especially in the health sciences and business administration. School teaching, traditionally the goal of a majority of students in general arts and science, no longer offers many opportunities because school enrolments are down and still decreasing.

Recruitment of personnel for the universities and colleges, too, has dropped as enrolment has tapered off. This has made the future bleak for new graduates with advanced degrees, most of whom in the past have been intent on careers in institutions of higher education.

Partly because of the lessening of the security of academic careers, university teachers have turned increasingly to collective bargaining. Salaries in the universities are negotiated separately in each institution. In some the teachers have unionized in accordance with provisions of provincial labour legislation, in others they have achieved similar bargaining rights by less formal means. (Community college teachers have been unionized since their institutions were established—most of them more than 10 years ago. In most provinces bargaining is on a province-wide basis, directly with the government or its agent.)

In the history of Canadian universities there are few cases of outright closure. But one took place in British Columbia in 1977. Notre Dame University of Nelson, a small private institution, was closed by the provincial government which acquired the property for use as a public centre for adult education.

This was the period during which the University of Toronto began its experiment with unicameral government. After lengthy discussion a new Act, effective in 1972, provided for a governing council to replace the two principal governing bodies of the university, the Board of Governors and the Senate. It was thought then that other universities might shift from the two-tier to the one-tier pattern. Some almost did, but finally backed away from the scheme.

In 1977 the University of Toronto named a one-man commission, Dr John B. Macdonald, to review the governing arrangements which had then been in force for five years and to recommend such changes as seemed necessary. He judged the plan essentially sound, and recommended that it be continued, though with some modifications.

Like every other activity financed by government, higher education has suffered from the economic recession which Canada has been experiencing for the past three years. Universities, colleges and students had been accustomed for a decade to increases in government financial support averaging overall 12 per cent a year. The increase in 1977 over the previous year was only half that.

During the period of rising enrolments, most provinces had adopted formulae which tied operating grants to student enrolment. These worked reasonably well, but when enrolment slackened it no longer provided a basis appropriately related to costs. Attempts to alter these formulae have improved the situation only slightly. As a consequence there is now an active search for a better way of providing government support which is both adequate and fairly divided among the universities and colleges.

From 1967 to 1976 grants were made to the institutions by the provincial governments, which were assisted by the federal government to the extent of 50 per cent of expenditures. In 1977 this shared cost programme was replaced by one which made the role of the central government even less obvious at the provincial level, although the federal government continues to show its concern.

The new legislation provides for transfers and cash payments to the provinces. In support of the established programmes" for the provision of health services and post-secondary education. The cash payments eventually will provide the same amount per capita of the population in each province, and will increase in step with the GNP. By 1973 most of the provinces had modified the arrangements for the development and coordination of their systems of post-secondary education. British Columbia established a universities commission and Alberta, which had a universities commission and a colleges commission, terminated both in 1978, thereafter locating the functions previously performed by the two subordinary bodies in the provincial Department of Advanced Education and Manpower.

Saskatchewan named a universities commission in 1974, much like that Alberta had just abandoned. In 1978 Manitoba merged its Department of Continuing Education and Manpower (the one responsible for higher education) with its Department of Education, which reorganized and renamed the advisory body, now the Ontario Council on University Affairs.

Responsible, the *Conseil des universités* was nudging the government of Quebec toward rationalization of their programmes according to the notion of *complémentarité*. Recommendations for restructuring were made with respect to the *CEGEPs (collèges d'enseignement général et professionnel)* and the universities, but changes are still under consideration.

Perhaps the most venturesome change was the establishment of the Maritime Provinces Higher Education Commission in 1974, a regional body coordinating all the universities and most of the community colleges in the three eastern provinces of Nova Scotia, New Brunswick and Prince Edward Island. Regional structures were established in the four western provinces, too. Since 1973 the ministers responsible for post-secondary education have met as a coordinating committee, and in 1976 a Council of Western Canadian University Presidents, a voluntary association, was formed.

Awakened interest in the quality of teaching led to the establishment on many campuses of pedagogical services, more often called centres for instructional development. The Ontario Universities Program for Instructional Development, operating since 1973, uses provincial funds to support projects proposed by individual institutions, departments or teachers.

Provision for distance education, too, has been extended. Notable are the *Télé-université* of the *Université du Québec*, and Athabasca University in Alberta. The latter, founded in 1970 to be a conventional institution, was redesigned when the province realized that student demand was declining, and since then has been devoted exclusively to distance education. In British Columbia arrangements began earlier this year to organize distance education with the cooperation of Britain's Open University.

A commission on Canadian studies sponsored by the Association of Universities and Colleges of Canada and carried out by Professor T. H. B. Symons deplored the lack of attention to Canadian material in field after field of university study, and pointed to what were considered to be undesirable concentrations of non-Canadian teachers in many departments, especially the social sciences.

Some reactions was defensive, but most institutions accepted the charge and set about correcting the situation. Since then restrictions have been placed on the recruitment of foreign scholars to university staffs, and differential tuition fees have been decreed for foreign students—in two provinces in 1977, with a third to follow this year.

Some of the elements of a science policy for Canada seem to be emerging, though not without much prodding from the research community. A federal Ministry of State for Science and Technology was created in 1971, and a joint federal-provincial committee on financing university research was formed last year. Earlier this year the federal research support councils were reorganized, now providing one for the medical sciences, one for the natural sciences and engineering, and one for the social sciences and humanities.

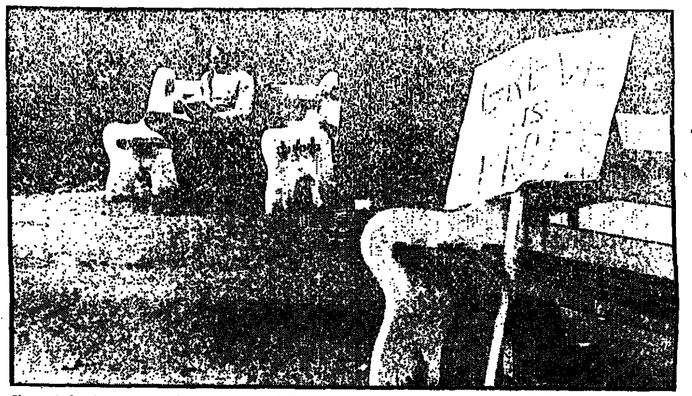
Two new trends were noticeable. The provinces insisted on having more to say about research within their borders, even though most of the support came from the federal government. And the pressure for mission-oriented, socially useful research became more marked. When announcing plans for reorganization of the granting councils the Minister of State for Science and Technology said that they would be expected to develop policies to relate research to areas of national concern, to achieve a regional balance of scientific capability and to encourage interdisciplinary research.

Throughout the past five years the real value of funds for research has decreased annually, and the research population has been aging without regular infusion of new graduates. Some relief from the gloomy prospect was provided in June when the federal government announced a new target for research and development expenditures of 1.5 per cent of gross domestic product by 1983, rising from the current figure of 0.9 per cent. Emphasis is to be placed on research in industry.

Pervading all recent developments has been a national unease, highlighted by the election of an *indépendantiste* government in the province of Quebec in 1976 and its immediate escalation of the campaign to make that society thoroughly French. But Quebec was not alone in exhibiting discontent with the power relationships between central and provincial governments.

Federal-provincial tensions were evident in the negotiations leading to passage of the Federal-Provincial Fiscal Arrangements and Established Programs Act in 1977, and in the OECD review of Canada's education policies, released in 1976. That review stressed the fact that the country had no national policy for education and challenged the federal government to play a stronger role. It noted, too, the leadership responsibility of the Council of (Provincial) Ministers of Education and urged it to provide a forum to ensure consultation among the key partners in the Canada-wide aspects of education, especially post-secondary education.

Edward Sheffield is professor emeritus of higher education at the University of Toronto.



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THES Third World Exchange Fellowship continues to thrive

by Peter Scott

At the last congress of the Association of Commonwealth Universities in Edinburgh *The Times Higher Education Supplement* established a Third World Academic Exchange Fellowship worth £1,000 a year. Today, five years and six "Third World Fellows" later, the scheme seems to have been a great success.

The fellowship, which is administered by the ACU, was designed to meet the growing demand for exchanges of both academics and administrators between universities in the developing countries of the Commonwealth.

Even five years ago the need to promote such exchanges was recognized. Soundings by the association had found several examples of exchanges which universities in the Third World were anxious to encourage. For example, Bombay University wished to establish links with social and behavioural sciences departments in east Africa, and the University of the West Indies wanted more cooperation with Nigerian universities.

However, the machinery—and, more important perhaps, the resources — to stimulate such exchanges did not really exist. So it was felt at *The THES* that an annual Third World Fellowship could in a modest way help to fill this gap.

The first award, in 1973-74, was to Professor Kwami of the Ghana University of Science and Technology. He went on a study tour of India to investigate small-scale industry and mechanized farms. The initial contacts he made between India and Ghana have now developed into a semi-binding link between two universities in these countries, Delhi and Kumasi.

Next year the fellowship went to Mr K. I. Fraser, estates officer of Fourah Bay College in the University of Sierra Leone. His project was very central to the concerns of the university administrator in the developing world. It was a study in both east and west Africa of the optimal use of existing buildings, the planning and programming of major new developments and the determining of building priorities.

Three years ago the award was split. Mr B. S. Bastiampillai, coordinator of development studies at the University of Sri Lanka, visited the University of Dar-es-Salaam on the other side of the Indian Ocean to study that institution's organization of development studies. His interest in development studies has since received further support from the Commonwealth Fund for Technical Cooperation.

He shared the award with Mr W. S. Yim, lecturer in geology at the University of Hong Kong. Mr Yim visited Malaysia to study techniques in tin extraction there. As a result of his visit informal links were established with two Malaysian universities.

In 1976-77 *The THES* fellowship went to Professor S. Ahmed, professor of electrical engineering at the Bangladesh University of Engineering and Technology. He visited India and Malaysia to discuss cooperative programmes in teaching and research. It is too early to see the longer-term outcomes of his visits.

The latest Fellow, Dr C. W. D. Braithwaite, lecturer in biology at the University of the West Indies, has just returned to Trinidad after a short attachment to the department of plant pathology at the University of Nairobi in Kenya. His particular interest has been diseases in tropical grain.

Apart from the direct effect of these annual awards—which it is recognized can hardly be more than a drop in the ocean—*The THES* Third World Fellowships seem to have had an important indirect effect. The existence of the fellowship has stimulated others to support similar exchanges.

For example, in the case of the latest award there were 26 applications—from India, from Papua New Guinea, from Sri Lanka, from the West Indies and many other developing countries in the Commonwealth. Although Dr Braithwaite was awarded the fellowship, an alternative award was made to another of the candidates and the ACU hoped to be able to persuade the Commonwealth Fund for Technical Cooperation to support about 10 others. In this way *The THES* fellowship has a valuable "seeding" effect.

Two developments now seem likely. The first is a decision to increase the value of the award itself. The second is that the existence of the fellowship will continue to stimulate exchanges between academics and administrators in universities in the Third World. The contrast between the ease with which academics can secure exchanges between universities in the rich, developed world and the difficulty of Third World exchanges remains—but *The THES* fellowship, we hope, has done something to reduce it.

Peter Scott is editor, *The THES*.

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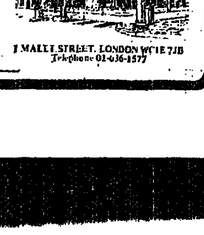
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Asa S. Knowles, *Editor-in-Chief*

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Asa S. Knowles is Chancellor of Northeastern University in Boston, Massachusetts. He has spent 30 years in positions of responsibility and importance in various different universities, and his eminence as author and counsellor is international.

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Relevance and self-reliance seen as keys to future

Arthur T. Porter discusses the service role of the University of Sierra Leone

The University of Sierra Leone consists of Fourah Bay College, Njala University College and a number of institutes like, for example, the Institute of Education and the Institute of Marine Biology and Oceanography. The administration is centralized under a full-time vice-chancellor, with a single governing body, the Court, and a single academic authority, the Senate, in each college there is a principal who is responsible for matters essentially domestic but otherwise acts for the vice-chancellor on matters academic.

To the five original college faculties (arts, economic and social studies, mine pure and applied science at Fourah Bay College and agriculture and education at Njala University College), a sixth has now been added (engineering at Fourah Bay, 1977) and all are now faculties of the university.

In 1973 the Sierra Leone Education Review was initiated. This review was an important educational event and will for many years continue to influence the development of the system. It had the full support of the President, Dr Siaka Stevens, who is also Chancellor of the university, and of the government. The work was financed mainly by the Carnegie Corporation of New York, the Sierra Leone government, and the Inter-University Council for Higher Education Overseas. Its final report was published in 1976 under the title *Sierra Leone Education Review—All Our Future*.

The review's main themes are relevance to the developmental needs of the country and its unique national characteristics; interdependency of the various subsystems of education; self-reliance to be inculcated in the clientele of the system and (as far as possible) in resource inputs into it; accountability, which emphasizes the maximisation and control of resources; and practicality, an important consideration for a small, relatively poor country.

For a country with very restricted provision for formal education at all levels and a negligible programme of adult and non-formal education, it is not surprising that some of the main recommendations of the review are for an expansion of the system and the development of a strategy for lowering the high (75 per cent) rate of illiteracy.

For the period 1976 to 1990, the review recommended the expansion of places in primary schools two and a half times, in secondary schools by 50 per cent, in vocational institutes three times, in colleges for primary school teachers five times, student places in the university by 35 per cent and university research and service activities three times. This linear expansion was also to be accompanied by qualitative growth.

Unfortunately, however, the economic situation has worsened since 1973 and the country will not be able to meet the modest and realistic targets set by the review if it has to depend exclusively on its own resources.

Apart from its specific recommendations, the review has established two things: it has demonstrated that the university, far from being an ivory tower in splendid isolation, is concerned about the education system as a whole and its place in national development. Second, it has set a precedent: similar reviews can now be mounted, for example in agriculture, the mainstay of the population, or in other fields such as teacher education.

Illustrative of the new thinking are the areas of new or more concentrated development in the last three years.

The department of animal science in our faculty of agriculture at Njala University College prepares students for degrees and certificates in livestock management, animal physiology, reproduction and breed improvement, animal nutrition and animal hygiene. The department also has a production unit which is now being developed to operate not only as a tool for teaching, but also as supplier both to the college itself and the surrounding country.

The purpose is not only to make the unit self-sufficient but also to involve it and the students at a practical level. An extension programme to schools and farmers in the area, where chicks, feed and other supplies are made available, has been initiated and has already proved both welcome and successful.

In his inaugural address in January, 1973, as Chancellor of the university, Dr Stevens called for it to apply its resources to those of the Ministry of Health and the Ministry of Education to make a joint contribution to health education and training. The Sierra Leone Education Review, in pursuing the matter, defined the needs in the health field as overwhelmingly for ambulatory primary health care rather than for hospital-based and specialist-level care, and recommended the establishment of an Institute of Health Sciences and the development of a department of community medicine within the university and a para-medical school at Bo for the training of community based primary care medical assistants for the nation.

This three-pronged project, the Integrated Medical Education and Training Programme, aims to coordinate the activities of all health training institutions at a national level, to provide training for intermediate-level health personnel, to provide continual evaluation of the country's health situation and to conduct research focused on community needs. It is our view that this programme provides a more feasible response to the country's health needs than previous proposals to set up a medical school.

Another area of thrust is the Institute of Marine Biology and Oceanography. An academic interdepartmental link is about to be completed with the department of oceanography, University College of Swansea, with the objective of strengthening and extending undergraduate and graduate and diploma studies, so that the nation can make better use of its rich fisheries and other marine resources.

A third new development is the establishment of the Institute of Public Administration and Management, the buildings for which are under construction on a site outside both colleges but adjacent to the Institute of Education. The institute's immediate objective will be to train managers and administrators to fill positions in the emerging structures at both high and medium level, its other task will be to examine the structures themselves to ensure that the programmes in demand for staff; the kind of educational background required, the role of the public sector and the role of intermediate technology all contribute to national priorities.

Because of the central role of the teacher and his multiplier effect on development, great emphasis is also being placed on the work of the Institute of Education. It has the International Development Assistance of the World Bank negotiated with the government a second loan designed, among other things, to provide physical facilities and specialist services in support of the institute's responsibility for curriculum development, in-service teacher training and research. The institute's instructional resource centre will be established in a number of teachers' colleges which will work closely with their Institute.

Meanwhile, the university has also continued to develop in its traditional ways. Student numbers have increased, though not in significant proportion, during the past three years. Perhaps the most important comment relates to the composition of the student body.

In the 19th and early 20th century, before the establishment of university institutions in Nigeria and other parts of West Africa, many students from these countries received their higher education at Fourah Bay College. The college and Njala University College continue to follow this tradition of service. Of the 794 full-time students at Fourah Bay College in the current academic year, 187 are non-Sierra Leoneans and of these 102 are from just two countries, Zimbabwe and Namibia. Of the 24 overseas students, 24 are non-Sierra Leoneans of whom five are from Zimbabwe and Namibia.

At Njala University College almost one sixth of the student population (104 out of 610) are non-Sierra Leoneans. Of the 76 male students, 46 are from Zimbabwe and Namibia; of the 18 female non-Sierra Leonean students, 18 are from those two countries.

There are 315 foreign students out of a total of 1,594 students in the university—almost 20 per cent. And of this number 171, or 54.3 per cent of the foreign students, are from Zimbabwe and Namibia, the rest coming from 23 other countries, 14 of which are African, the others being Bangladesh, India, Sri Lanka, China, Mauritius, Britain and the United States. Indeed, there are nearly as many foreign students as the number of Sierra Leone women in the university.

It would be difficult to find another university in Africa providing proportionately as much support and assistance in the training of the cadre of manpower which Zimbabwe and Namibia will require as they move into independence and statehood. If we had more resources we would do more, but what we are able to do, and the contribution we are able to make, we gladly do.

Arthur T. Porter is vice-chancellor of the University of Sierra Leone.

Douglas Logan remembers previous ACU congresses

Full circle after three decades

It happens that I have had the fortune to attend all the six quinquennial congresses since ... ear. Indeed, I am the only living person who can claim that distinction and I fully intend to be ... ses at the twelfth of such congresses in Vancouver next week.

I realize the dangers of being regarded as "a voice from the ..." (a not very felicitous description by one vice-chancellor of ... of his colleagues at the 1963 congress) and I am mindful of the ... "Old Men Forget". I have ... taken some precautions to ... my recollections and, for the ... half of the period, have had ... recourse to *Community of Universities*, that mine of information ... produced by Sir Eric (now ... Ashby for the 1963 congress. ... ement of my indebtedness will ... evident to anyone who has read ... stimulating book.

The Second World War, like the ... interrupted the regular pattern of congresses which started in ... 1912 it was not until 1948, 12 years after the fifth congress had met in Cambridge, that the sixth congress convened, this time in ...

The initiative was taken by the Sir Hector Hetherington, ... of the University of Glasgow, but he was enthusiastically ... by the late Dr Cyril ..., principal of McGill University, and by Dr N. A. M. ... Mackenzie, then president of the University of British Columbia. The ... burden of organizing the congress fell on the new secretary of ... association, the late Dr John ..., formerly registrar of the University of Melbourne.

One of the main tasks of the sixth congress was constitutional reform. The association, then a company limited by guarantee under the title of the Universities Bureau of the British Empire, was decidedly ... in its organization.

The executive council, its governing body, consisted of 21 persons, ... of whom were heads of British universities; 12 were persons resident in Britain who had connexions with universities in the overseas countries of the Commonwealth. The chairman was a distinguished lay public figure, Lord Harlech.

All that was changed. The title was altered to the Association of Universities of the Commonwealth and the executive council was reconstituted with 16 members, all heads of universities, of whom only ... came from Britain.

Although the membership of the council has since been increased to ... the United Kingdom representation remains unaltered. In addition there is a chairman, a deputy chairman as honorary treasurer and a ... honorary treasurer, of whom often come from Canada and two from Britain.

The reconstituted executive committee meets at least annually and ... of its inter-congress meetings usually held outside Britain. It ... decided in 1948 that the venue of congresses, which hitherto ... always been Britain, should ... between Britain and an overseas Commonwealth country, the change being implemented in 1958 when the eighth congress met in Canada. In 1963, the limited liability company was wound up and a Royal Charter was presented to the association by Queen Elizabeth the Queen Mother at the congress banquet.

In 1970, the policy of the association was further revised to give its activities a wider Commonwealth orientation. The new secretary general, Sir Hugh Springer, a distinguished West Indian, was given a remit instructing him to develop the practice of his predecessor, Dr Foster, of making personal visits to overseas institutions, thus reinforcing its genuine Commonwealth character—though perforce its office remains in London.

Two other developments deserve notice. The 1948 congress was preceded by a meeting of executive heads of Commonwealth universities and this initiative proved so successful that such a meeting now forms an integral part of the congress programme.

Moreover, it has also become the practice to hold such a meeting in the middle of the inter-congress period, the first such gatherings being held in Ghana in 1971 and the second in New Zealand in 1976.

Having guests from the United States, which dates back to 1921, was further strengthened in 1953 when a formal invitation, always since renewed, was extended to the Association of American Universities to send 10 delegates to the congress.

Incidentally, the importance of the congress is underlined by the fact that the International Association of Universities usually holds one of its council meetings in the same country and about the same as the quinquennial congress and the members of that council are welcomed as observers to the congress.

So much for constitutional changes: what is more difficult is to put one's finger on changes in attitudes. In 1948, despite the restructuring, the overseas countries of the Commonwealth still looked to Britain for leadership in university matters—with the possible exception of Canada where counter influences were exerted by the nearness of the United States, with its vast array of institutions of higher education, and the presence in Quebec of universities which looked to France rather than to Britain.

The unorthodox British solution to the problem of financial relations between universities and the state provided by the University Grants Committee, which bypassed the Ministry of Education and reported directly to the Treasury, attracted much attention and various adaptations of it were devised in Commonwealth countries.

The Australian universities owe much to the committee over which Sir Keith (now Lord) Murray, then chairman of the University Grants Committee, presided whose report in 1957 was accepted and implemented by the Australian government.

Two years later, a committee chaired by Professor Sir David Hughes Parry, formerly vice-chancellor of the University of London and one-time deputy chairman of the UGC, aided by a Canadian colleague, Dr Geoffrey Andrew, advised the New Zealand government to give the country's universities a better deal.

The development of university institutions in Africa, the Far East and the Caribbean, triggered off by the Asquith Commission on Higher Education in the Colonies, was throughout this period being actively assisted by the University of London through its Scheme of Special Relation, by the Inter-University Council for Higher Education based in London and by the British Ministry of Overseas Development.

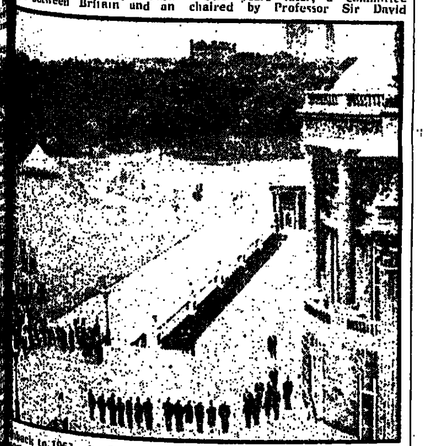
New links were also formed between British universities and those in the Indian sub-continent. The impact of British universities on those in Canada was less influential, though, in the attempt to solve the problems of academic representation on boards of governors, the Canadian universities invoked the aid of the late Sir James Duff, formerly vice-chancellor of the University of Durham, who was ably assisted by Professor R. O. Berdahl, now at the University of Buffalo, whose book *British Universities and the State*, published in 1957, remains a classic.

Relations between universities and the state, as Lord Ashby points out in *Community of Universities*, is a perennial topic at quinquennial congresses. It was on the agenda in 1926, 1948 and 1953 and reappeared incidentally in 1968. It is, moreover, never absent from the informal discussions at the meetings of executive heads.

The difference now is that the problem is not how to extract enough money from governments for expansion but how to get adequate supplementary grants to make good what the UGC has called the ravages of "the locusts of inflation".

In this tricky exercise the universities of Britain and the UGC, now responsible to the Department of Education and Science and not to the Treasury, have not been noticeably successful. The wheel has turned full circle and perhaps it is our turn to learn from developments in other parts of the Commonwealth.

Sir Douglas Logan was formerly principal, University of London. He is now deputy honorary treasurer of the ACU.



Back to 1963 : the Queen and the Duke of Edinburgh meet congress guests at a Buckingham Palace garden party.

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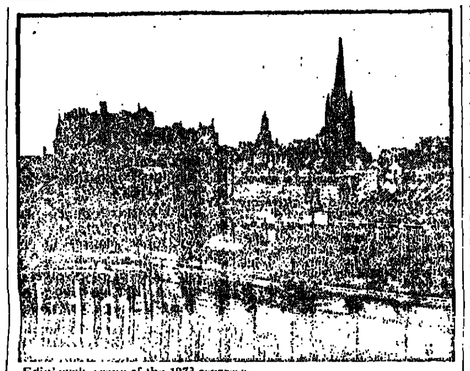
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Edinburgh, scene of the 1973 congress.

Oiling the wheels of professional contact

by John Chadwick,
Director,
the Commonwealth
Foundation

When the merits or otherwise of large-scale conferences became a matter for earnest and continuing debate among what are now 36 Trustees of the Commonwealth Foundation, the former Secretary-General of the Commonwealth, Arnold Smith, was wont to bring matters to a conclusion by reflecting that any act which helped peoples of the Commonwealth to come together was a "good thing".

That his dictum has carried weight is evident from the fact that foundation awards to the last three ACU congresses—in Sydney, Edinburgh and now Vancouver—have totalled close on £70,000 worth of travel grants; these not merely to the benefit of vice-chancellors from the newer Commonwealth but, perhaps more significantly, to ensure the attendance at such gatherings of other delegates lower down the line.

The ACU is one of the Commonwealth's least publicized success stories. It has built steadily since 1913 on a common heritage of language, history and shared educational standards. And, in so doing, it has faced its own quite spectacular membership explosion.

The ACU is a world-wide, practising freemasonry of higher educators. Apart from its consciously united sister body, the Inter-University Council for Higher Education Overseas, there is nothing to rival it on the international scene. Worthy regional bodies exist, and rightly so; and there is the International Association of Universities. But the latter frankly holds no candle to the practical, friendly, well-documented relationships existing between universities within the Commonwealth itself.

All of which hopefully supports Commonwealth Foundation encouragement of these quinquennial conferences. Not only have the foundation's trustees voted some £70,000 for attendance at them. They have also cooperated with the officers of ACU in promoting the Commonwealth Universities Scheme for the Interchange of university administrators. From that project close on 100 candidates have already benefited, at a cost of £65,000.

Since the aim of the foundation, created by Commonwealth heads of government in 1966, is primarily to promote in the non-official world the extension of professional skills and interchanges, it is worth adding that its trustees have also financed the following further projects in the field of higher education:

The creation of a chair of modern Commonwealth studies, tenable annually at the University of Leeds by some distinguished Commonwealth citizen from outside Britain—with incumbents to date from Australia and Kenya and potentially from Canada and India.

The funding of lectureships in accountancy at the Universities of the West Indies (St. Augustine), the South Pacific and Mauritius.

Support over close on a decade for the Royal Society/Commonwealth scientific bursary programme, under which distinguished scientists from newer Commonwealth countries working in applied areas of the natural sciences may further their research in some other country of the Commonwealth.

The provision of numerous individual study, conference and seminar awards to individual academics so that they may both enrich their experience and in turn pass on acquired skills to others within the Commonwealth.

The sum total of such awards adds up to £800,000—small beer when compared to campus-oriented capital awards—but perhaps of more lasting value in terms of "brain-pot" and personal pay-off to mention.

Early in 1975 the foundation sponsored a seminar in Jamaica under the rather sonorous title—"The Professions, Universities and the Civil Service—Mutual Interaction". By coincidence the present ACU secretary-general, Sir Hugh Springer, was then also chairman of the foundation's Board of Trustees and was thus able to preside over the Jamaica meeting.

I can do no better than summarize the main conclusions from that fascinating (and deplorably underpublicized) workshop which brought together civil service leaders from the Caribbean area, representatives of the many Commonwealth Professional associations and centres sponsored by the Commonwealth Foundation's Trustees, and delegates from a number of other international bodies.

The broad findings of the seminar were that:

"In an effort to foster mutual interaction and the identification and protection of the public interest, governments should be persuaded to accept that universities, the professions and business were concerned with national development and planning processes.

"Thus, collectively or individually, academics, professionals and businessmen should be invited to involve themselves at the earliest planning stage in policy formulation affecting the public interest and be encouraged to provide expert and unbiased advice.

"Recent changes within the world economy and the challenge to establish a new economic order presented all countries of the Commonwealth, richer and poorer, with the need to rethink current training, re-training and research programmes. Governments should invite the cooperation of universities and professions in adapting training courses and textbooks and in involving themselves in specific applied research programmes in order to assist in the shorter term and urgent problems now facing their communities.

"Steps should also be taken to inform the public about the activities undertaken and the services offered by the professions and the universities."

More to the same effect was said at the Jamaica meeting. What was then debated is equally true today. It will be interesting to see how Vancouver, 1978, reacts.

Richard Griffiths, director of the Inter-University Council for Higher Education Overseas, on academic exchanges

Inter-university relations not a suitable case for making money

When I served on the staff of the University Grants Committee it was a surprising but very noticeable fact about the academic members of that august body that, if ever the question arose, the first loyalty of the great majority was to their academic discipline and not to the particular university from which they came.

This, of course, is because universities are quite unlike government departments or industrial firms in being a loose aggregation of largely autonomous academic units with limited central direction. They have objectives rather than policies. Their international relations therefore come in many different forms and the individuals concerned may be students, staff or even vice-chancellors. All have their place in the international dimension and their own methods of indulging in such activities.

Perhaps, indeed, it is misleading to talk about the international relations of universities. They are institutional relationships at all in many cases but are relations between like-minded groups of individuals—as they have been throughout the 800 years and more of European university development. It was Jim Perkins, the distinguished former president of Cornell, who reminded us that "consensus is not an academic virtue".

Ministers and civil servants of the same, or different nationalities will sit around a table with their carefully devised briefs fighting every inch of the way to ensure that the maximum number of their desiderata are incorporated in the final consensus. They know well, however, that to reach a consensus if they possibly can is the prime—"through-put" and personal pay-off not the sole—purpose for which they meet. They are "consciously applying thought as a preliminary to action", to paraphrase Lord Balfour's injunction to government administrators.

Academics are different. They meet each other when they can because problems exist touching upon their own scholarly interests and these need analysis and discussion with others in the same and adjacent fields. But they do not necessarily have to solve these problems. Nor are academics responsible for carrying their often tentative conclusions into effect in the community. They are not, like civil servants, concerned with action and with the assembly and weighing of such facts and factors bearing on their problems as can be put together in the time available to them. The timescale is different.

Inevitably, not all academic relationships across international frontiers are universally beneficial. Academics, like others, warm to international travel and overseas contacts for their own sake as well as for the benefits, if any, that ensue. The Inter-University Council and other similar intermediary bodies find themselves under regular bombardment from United Kingdom and overseas academics seeking financial and programming assistance to enable them to visit or undertake working assignments in other universities.

Within the Commonwealth, this bombardment is especially noticeable from staff of those Commonwealth universities whose periodic study or sabbatical leave entitlements seem extraordinarily generous to one brought up in the austere leave conditions of the British civil service.

Catalyst bodies like the IUC are familiar, too, with the requests for support for academic attendance at international conferences on different topics. Not all who seek to attend such conferences—even as keynote speakers—bring about the mutual benefits I have been talking about. But many do. It is no easy task for those concerned to sort out the chaff from the wheat or to ensure that available academic skill in one country is properly matched to the academic needs of another.

In the IUC we have one or two rules of thumb which help us in this task. One is to insist that nobody is supported on a short period overseas assignment in another university without a positive request for his services received from the central authorities of the recipient country. Another is to make it an unalterable requirement that the invited university also treats the visiting academic as its "house guest" and meets the cost of his board and lodging.

Similarly, academic staff who go overseas to occupy established posts should ideally, in our view, be replaced by full staff members of the host university concerned and not by "expert advisers" fully financed from overseas, or even if an aid agency is ready to provide such support.

Above all, I have come to believe that international relations between universities are seldom managed by the individuals concerned or by the institutions to which they belong. If we go into the enterprise with the aim of making money out of it, I suppose, so far as to say that a degree of profit motive is the secret of the effectiveness in inter-university relations—another contrast with international relationships, particularly in the commercial field.

The secret of success in international relations between universities is to identify possible areas of mutual interest, to bring those concerned together and, if they spark, to give them their head. The means by which the external aid is injected and the nature of my facilitating role in this is less important.

It can be through a multilateral based body like the IUC or the Canada-US Mid-west University Consortium for International Activities (CUMUCIA) in America, or NUFFIC in Holland. These bodies can be financed centrally like the IUC and NUFFIC, drawing on government subventions or assessments as with CUMUCIA, by specific contributions from the universities themselves or a mixture of the two as is the case with the ODM/British Council pattern in their joint aid operations in developing countries. I have served by the IUC in Canada, by the government agency, but with a tight grip on aid to overseas universities but increasingly it is the Canadian universities to undertake and supervise the task for the

Cultural cooperation is a convenient expression to describe the infinite variety of benefits which can flow from intelligently contrived and conducted international relationships between universities. Take as both the 1977 Report of Sir Michael Swann's Working Group on British Universities and Overseas Development and Lord Ashby's Fawley lecture, "A Second Look at Donne", have clearly indicated represent a process of great significance for national relationship between nations. ernments can stop them; they also facilitate them. They can, however, bring them about when the conditions are favourable.

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Ungku Aziz, vice-chancellor of the University of Malaya, looks at the way Malaysia's New Economic Policy has altered the role of the country's campuses

From ivory towers to active agents of social change

Ezra Pound translates the Confucian principle, *chung yung*, as the "unwobbling pivot". *Chung* signifies what is neut neither to one side nor to the other. The word *yung* signifies something unchanging.

In some senses *chung yung* characterizes not just the university system or the national education system but the whole fabric of social relations in Malaysia.

Small elite groups dominate the political and economic systems. The foreign companies are largely British (rubber and tin agency houses and banks). The Chinese are busily thrusting into this foreign enclave while their system of monopoly-monopsony marketing permeates the whole Malaysian economy. The Malays control the civil service and the armed forces as well as the key political institutions.

When the nation exploded in the Kuala Lumpur riots of May 1969, the real potential for violence inclined all leaders to define a new bargain. This is enshrined in the New Economic Policy which has two declared prongs: poverty eradication irrespective of race and the restructuring of society so that economic activities shall reflect the proportions of the several ethnic communities.

This is where the universities find their tasks as institutions established under the Universities and University Colleges Act 1971.

The philosophy is that universities should not only be agents *for* change but agents *of* change. They cannot be ivory towers doing research for the sake of research. While it may be true that innovative ideas and a critical examination of government's policies and performances may contribute towards change, hopefully in the direction of development, the Malaysian universities are expected to achieve considerably more.

They are expected to redress the discrimination against rural students that extended up to 1970 by adjusting admissions. For example, if all things were more or less equal, since the Malays constitute 50 per cent of the total population, one would expect to find about 50 per cent of the students in science or engineering to be of Malay origin. However, when the Malay percentage ranges from 5 per cent to 15 per cent, the imbalance needs re-examination, on grounds of equity, if for no other reasons.

Since 1971, therefore, the University of Malaya has been much concerned with finding ways to redress racial balances in certain faculties without lowering standards. New universities have been established where the proportions have been much the other way to make up for the lost years.

The academic and general staff also have to be matched with the national proportions by means of selective recruitment and training programmes. Standards should not be lowered. No one should lose his job or his fair prospects for promotion. Therefore, the restructuring must be spread over time. It must be planned. Nevertheless, no one can be allowed to say, "*Après moi le deluge* or please not now, maybe later".

Add to all this the national desire to change the medium of instruction from English to Malay and one sees the size of the task of university administrators in keep the pivot from excessive wobbling.

Although it would be legally correct to say that the University of Malaya was founded on January 1, 1962, its genesis stretches back to 1905 when the British colonial government set up a medical school followed by Raffles College in Singapore in 1929. These two institutions were amalgamated into the University of Malaya which was founded in Singapore in 1949.

After Independence, the government of the Federation of Malaya negotiated for the establishment of a separate university. Thus the University of Malaya was established in Kuala Lumpur as a branch campus in 1959 and it became a separate institution in 1962. The facilities remaining in Singapore became part of the University of Singapore.

The next phase of university expansion occurred seven years later. The University of Science Malaysia (USM) began teaching in 1969, the National University of Malaysia (UKM) in 1970, the University of Agriculture, Malaysia (UPM) in 1971 and the University of Technology, Malaysia (UTM) in 1972.

The phasing is not quite so hectic as it may seem, because the University of Agriculture, Malaysia evolved from an agriculture college that had existed since 1931 and the University of Technology, Malaysia was based on a technical college which had metamorphorized from a technical school of the Public Works Department established in 1925.

In Malaysia, under the Universities and University Colleges Act 1971, a university can only be established by an Incorporation Order. Hence there is uniformity in the constitutions and nomenclature of the universities. In recent years, the government has obtained further uniformity by having common salary scales, conditions of service and procedures for recruitment.

Enrolment statistics show that while the University of Malaya is holding its intake constant, the other universities are continuing to expand. According to the Third Malaysia Plan (1976-80) university level enrolment should reach 24,434 undergraduates by 1980. This does not seem large if it is compared with the 1977 estimate of population of 12.53 million or one estimate for 1980 which is 13.91 million.

In other words, in 1977 university enrolment represents 0.14 per cent of the total population or 0.6 per cent of enrolment at all levels of education.



Bridge carries water supplies to the rural areas.

Even so, there are already rumblings about unemployed graduates. In this writer's view some of the so-called unemployed are actually unemployable because they lack the skills that potential employers in the $500 to $1,000 per month market could reasonably expect. Others are voluntarily unemployed because they prefer to wait for jobs in the big towns. As in any developing country, it could become a serious problem if the national economy failed to develop quantitatively and qualitatively so as to absorb graduates.

While the universities are conscious of this issue, the inherent conservatism of academics may postpone serious reflection about curricula until it literally boils over.

Two programmes of the University of Malaya may be of some general interest. Both have been designed to meet the needs of the New Economic Policy.

First, there is a need to double or even triple the intake of the indigenous Malays into the science stream faculties. It is desirable to draw these Malays from the rural areas, where 90 per cent of them live.

One of the causes of rural poverty had been the neglect of these areas in the provision of education, health, water supplies, roads and so on. Thus, even if secondary schools are established in these areas the students do not do well in O levels and when they are collected in schools located in the towns to study for the HSC or A levels, they have difficulties in getting results that would give them minimum qualifications for university admission.

Even if they scrape through, they are hard pressed to cope with the pace set by the bulk of students who come from affluent schools in the big towns. Thus, they tend to fail in the final or second-year examinations. Because the university teachers are largely of non-Malay origin there are cries of racial discrimination.

To create a regular supply of well-prepared students for such faculties as medicine, dentistry, engineering and science, the University of Malaya has set up a Centre for Foundation Studies in Science. We have deliberately set out to collect boys and girls from neglected schools in the rural areas on a strict quota system.

We prefer the best students from the worst schools rather than the worst students from the best schools. Two hundred and fifty carefully selected students are brought to the university where they are given a two-year pre-university course. Their curriculum has been designed by the faculties that will later receive them. They are taught by university lecturers and associate professors. By 1975, or 1980 at the latest, we expect to find enough candidates to provide 50 per cent intake to all the science stream faculties that are yet unable to meet their requirements of ethnic proportions.

Second, there are the language issues. That is, there is a problem of Malay and a problem of English.

For all practical purposes, Malay is to replace English. However, this is being accomplished in a series of planned phases. Although they may have been born and brought up in Malaysia, large numbers of staff and students have to be taught their national language. Teaching materials have to be developed. Every faculty has a plan. In the National University, Malaysia as well as the University of Technology, Malaysia problems of conversion have not arisen because right from the start they have used Malay as the medium of instruction.

Since the whole education system is turning over from English to Malay by 1987, the university intake from the schools will consist of students who have received all their education in the national language.

One experiment now being tried out in one university is to teach students how to use the English language for the specific purpose of gaining knowledge. That is, they are taught how to read English texts in science or in any other selected field of knowledge they need to know. It is hoped to give this programme, which has taken four years of research and experiment, some international exposure early next year.

Called the University of Malaya English for Special Purposes Project, it is the fruit of collaboration between the Inter-University Council, the British Council and staff from the University of Birmingham in collaboration with Malaysians from the Language Centre of the University of Malaya. It may solve the problem of acquiring knowledge which is only available in materials written in English.

MALAYSIAN UNIVERSITIES
UNDERGRADUATE ENROLMENT, ACADEMIC STAFF AND OPERATIONAL BUDGETS, 1977

UNIVERSITY	First Degree Enrolment[a]	Teaching Staff[b]	Annual Recurrent Budget[c]	Net Intake 1977 First Degree Courses Only[d]
UM	6,728	1,036	$54,420,000	2,233
USM	3,022[e]	413	$28,594,160	850[e]
UKM	3,817	627	$37,340,000	1,160
UPM	1,180	441	$27,710,842	440
UTM	731	515[f]	$19,787,171	200
	15,476	3,032	$167,852,173	4,923

a—does not include enrolment in integrated, matriculation, pre-university and diploma courses.
b—only teaching staff of the grades of professor, reader, associate professors, lecturers and assistant lecturers (this grade is available only in UTM) are shown. Does not include research fellows, tutors and language teachers.
c—does not include development funds but includes payment of arrears of salaries consequent to the implementation of the Cabinet Committee Report on Salaries.
d—does not include intake into matriculation, pre-university and diploma courses where entry requirements are different from those required for admission to first degree courses.
e—includes 775 students enrolled for off-campus degree programmes in science, humanities and social sciences.
f—includes 286 of assistant lecturer grade.
g—includes 265 students admitted to off-campus degree programmes.

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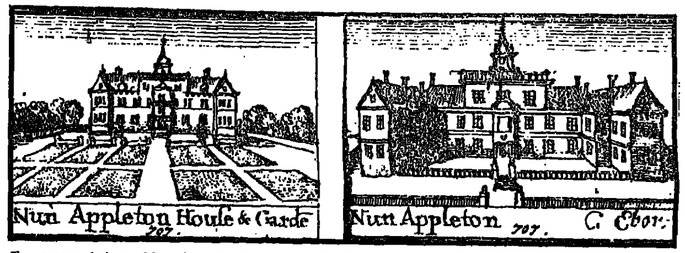
Marvell and the High Renaissance garden

Andrew Marvell: his life and writings
by John Dixon Hunt
Dent, £8.95
ISBN 0 236 40124 6

Remarkably little is known about Marvell, and he does not give much away about himself. His letters are impersonal; and neither the dates of many of his early poems nor the authenticity of the later satires are certain.

In this handsome tercentenary biography and interpretation of the poet, John Dixon Hunt has had to make his bricks with the minimum of straw and reconstitute only the general background to the many undocumented areas. Virtually nothing is known, for example, about what he did and saw on his four-year tour of the Low Countries, France, Italy and Spain during the Civil War, and Dr Hunt can only give an account of the generic grand tour of the period as described by writers such as Evelyn, and assume that Marvell's journey followed the same pattern. Nor can he offer any direct insight into the logic behind Marvell's apparently inconsistent political loyalties: as royalist yet friend to Milton; anti-Catholic yet supporter of religious toleration; trusted servant of the commonwealth and also of the restored monarchy.

Here, for lack of precise information, Hunt is in some danger of presenting Marvell as a more ambiguous figure than he was in reality, and reading into the later Marvell the genuine and very natural ambivalence of attitude expressed in the "Horatian Ode upon Cromwell", written when the execution of Charles I was still fresh in memory. The later ode written on the first anniversary of Cromwell's assumption of the Protectorate tells a different story, and suggests that Marvell, along with Dryden, represents one of the typical reactions to the Civil War. Though appalled by the destruction of the monarchy, he recognized that nature abhors a vacuum in political power as in everything else, and was prepared, therefore, to support any form of effective government. The stupidity, corruption and sectarian squabbles under Charles II provoked his strongest satire, and seem to have produced a nostalgia for the firm hand of Cromwell again.



Two engraved views of Nun Appleton House by Daniel King, about 1655-60, from Andrew Marvell: poet and politician, a catalogue compiled for the British Library tercentenary exhibition by Milton Kelliher (British Museum Publications, £7 and £2.50).

Hunt recreates the political background of the Restoration with great scholarship and skill. For most of us, however, it is the earlier poetry which matters, and the most original and illuminating part of this book is that which deals with the "garden" poems, culminating in "Upon Appleton House". Hunt's own special interest has been the landscape painting of the nineteenth and eighteenth centuries, and perhaps he came to the seventeenth-century arch-poet of gardens by this route. It is here that his reconstruction of the grand tour justifies itself.

The High Renaissance gardens of the continent, such as those of the Villa D'Este at Tivoli, were an every traveller's itinerary and were presumably visited by Marvell. With their bas-reliefs, emblems and statues of tutelary deities designed to proclaim the glories of the family, their landscaped fortifications, their lavish use of waterworks and other forms of art to improve on nature and produce sudden, calculated theatrical changes of scene rivalling those of an Inigo Jones Masque, they were in advance of anything in England at the time.

Appleton House was not in the High Renaissance style, but Marvell's poem displays it as if it were, and confers upon it the attributes of the best continental models. Although the work of "no forrain architect", the house celebrates in its Vitruvian proportions and "stately frontispiece of poor" the humanity and history of its owner, and the tutelary deity of the place who "straightness on the Woods bestows" is Mary Fairfax in the role of Flora. The landscaped fortifications of the Dutch gardens are suggested in Fairfax's flower beds "in the just figure of a fort", and developed in the amusing military imagery of the tulips; and the water-meadows are presented in a sequence of vividly theatrical scenes appropriate to a garden as masque: "This scene again withdrawing brings . . ."

Approaching "Appleton House" from the continent in this way adds a new dimension to the poem; but something is lost in ignoring the English literary tradition which also helped to shape it. Hunt makes no reference to Bacon's essay "Upon Gardens", for example, or to Sidney's extensive use of Renaissance garden scenes in the *Arcadia*. Spenser's flower of Bliss is, after all, a highly artificial Italian Renaissance garden masquerading as Nature, with the object of persuading Guyon that nature is still unfallen, so that Paradise, not having been lost, need not be regained. Marvell is clearly familiar with this kind of thing: he writes like a Guyon who has learnt the secret of the Bower, and though deeply attracted by the relative innocence of his own garden "paradice", he continually reminds us that the Fall is there, in the mimic warfare of the flower garden or the anti-pastoralism of "bloody Thestylis", who cuts the landrail which the mowers have wounded, with a wry reference to the quails and manna of the Old Testament.

"Upon Appleton House" is a more traditional poem than Hunt allows; and indeed my only criticism of this excellent book is that it pays insufficient attention to the poetry of Marvell's contemporaries and predecessors and tends to treat as personal to Marvell qualities which are literary and traditional. For example, he attributes to Marvell's own "emphatic Puritanism" aspects of the poems which are not specifically Puritan or peculiar to Marvell. The "Dialogue between the Resolved Soul and Created Pleasure" reworks a very old and traditional debate; the "Coronet" owes as much to Herbert, and the "Drop of Dew" to Vaughan, as to any Puritan conversion which Marvell may have undergone.

In spite of this, however, the book is valuable, scholarly and eminently readable. Its format is that of the coffee-table picture book, but unlike the majority of its kind, it is not superficial, and its many and exceptionally well-chosen plates quietly reinforce the points which its text is making.

Maurice Evans

Revised correspondence

The Letters of William and Dorothy Wordsworth (second edition)
volume III: The Later Years; Part 1: 1821-1828
revised, arranged and edited by Alan G. Hill
Oxford University Press, £20.00
ISBN 0 19 812481 3

Editions of the classics are perhaps the least permanent of literary works. Some criticism can become classic in its own right, in spite of the advance of scholarship or changes in taste. But the best of editions probably needs doing over again at least every half-century or so. Even Birkbeck Hill's Johnson had to be revised.

So that it is with no surprise that we find the great edition of the letters of William and Dorothy Wordsworth, begun by Ernest De Selincourt in 1935 and completed in 1939, is already undergoing a drastic revision. With letters there is the problem that more and more are always being discovered: it is the nightmare of an editor that what will probably happen when he has already gone to press. The editors of the present edition missed the benefit of the batch of often moving Wordsworth letters in the amazingly rich and interesting collection sold at Sotheby's last year (now, through a national appeal, secured by the Wordsworth Museum at Grasmere.

In this first volume of the *Letters of the Later Years* Alan G. Hill has taken over from his previous colleague Mary Moorman. There were two volumes of the later letters in De Selincourt's edition; to this collection 600 more have been added (there are many completions of phrases and corrections of misreadings: Wordsworth had, and admitted he had, a vile hand. Seventy of the separate collections of letters to Crabb Robinson and to his American editor Henry Reed have been incorporated.

Though we have passed now from the middle to the later years (the poet was now in his fifties) there is a strong sense of placid middle age about the period 1821-28 covered in this volume. The blows are softened by the death of old friends such as Scott, Coleridge and Lamb (who, to be reserved for the next volume, Wordsworth did indeed lose his old friend and benefactor Sir George Beaumont in 1827; they shared a common passion for landscape gardening in their respective homes of Coleorton and Rydal Mount. The Wordsworths were now firmly settled in the latter house, becoming part of a society with their neighbours and the new summer visitors like the Arnolds at Fox How. The poet continues in a quieter mood to enjoy the beauties of the Lake region, but he does not cease to write poetry: the much neglected *Ecclesiastical Sketches* (later called *Ecclesiastical Sonnets*) appeared in 1822. They exhibit the mature Wordsworth, profoundly conservative and yet no conventional Tory; strong in his sense of "what remains behind", and yet with a feeling for development. There were excursions, too, to Holland (1823) and the Rhineland (1828) which produced meditative poems. Wordsworth avoided France: he felt the only interesting parts were the mountains on the frontiers.

Some of the most interesting of the newly published letters are those to his patron Viscount Lowther concerning the Distributorship of Stamps for Westmorland and Cumberland. We learn that the office was no sinecure and that it did not really pay Wordsworth very much; there is a close account of the workings of the office through its sub-distributors. Also in the letters to Lowther there is comment on public affairs and the great issues of the day before reform. There was an election in Westmorland in 1826 with Henry Brougham the radical opposing Lowther and standing for the sort of Whig progressivism Wordsworth opposed. We learn of the poet's objections to Catholic Emancipation. Dorothy's letters are more domestic, about children and other people's miscarriages, written mainly to her friend Catherine Clarkson.

Wordsworth is not one of the great letter writers, but Hill has done him splendid justice, editing with exemplary care and adding informative notes, especially helpful for their brief biographies of persons referred to.

Roger Sharrock

The Chaucerian quarry

Shakespeare's Chaucer: a study in literary origins
by Ann Thompson
Liverpool University Press, £8.75
ISBN 0 85323 463 9

The works of Chaucer were very important to Elizabethan literary culture, for they constituted the only substantial body of clearly major writing of artistic value in the local vernacular. Moreover, they were easily available. Thynne's collected edition of 1532 was twice reprinted, and issued by Stow again in 1561, much supplemented. In 1598 Speght edited another edition, with further additions, and this time presented Chaucer clearly as a "classic", complete with portrait, a life, analyses, and a glossary of "hard words".

It is this edition (or Speght's next one of 1602) which Dr Thompson, in her thoughtful and valuable study, sees as possibly refreshing the Elizabethan knowledge of Chaucer and promoting a small flurry of plays rehandling Chaucerian plots, including *Troilus and Cressida*. But Chaucer was well known before, and the useful table of references Thompson provides to Shakespeare's own quotations, allusions and derivations, extends from *The Rape of Lucrece* in 1593-94 to his participation in *The Two Noble Kinsmen*, based directly on *The Knight's Tale* at the very end of his career. There are few plays that do not have some reference, and almost all of Chaucer's works, except his bawdy poems, are referred to.

Thompson's judicious establishment of these references, which has not been done so completely before, constitutes the main body of her book, and puts Shakespeare's knowledge of Chaucer beyond a peradventure. It is valuable in that, in her detailed work, she quotes the texts of editions actually available to Shakespeare. Thompson provides a number of sensible local observations on both Chaucer and Shakespeare, though she tends to assume that all "rhetoric" is flummery which reveals a character as insincere or silly. It is perhaps a pity, too, that she does not consider in general, or at least does not provide even a negative report on Shakespeare's possible use of what we now think of as "Chaucer apocrypha", the non-Chaucerian writing that appears in all the sixteenth-century editions.

What did Shakespeare principally draw from Chaucer? He took what most Elizabethan writers took. First, he used him as a quarry for material. In this respect the Elizabethan use of an old author was purely medieval. More significantly, what seems most to have attracted Elizabethan writers, including Shakespeare, was medieval romance in Chaucer. Thompson is very sympathetic and perceptive here, well perceiving that most modern critics assume the naturalistic standards of the nineteenth-century novel when they condemn the romance plot.

She points out that *The Knight's Tale* was the most popular and admired of Chaucer's poems after *Troilus*, that it was used extensively by Shakespeare in *A Midsummer Night's Dream*, and was twice dramatized before *Two Noble Kinsmen*. One should allow to the stage, as Elizabethans did, the dramatic power of stylization, ritual, symmetry, ceremony. What Shakespeare, unlike some of his contemporaries, and most of our contemporaries, did not appear to notice in Chaucer was his bawdiness and naturalistic realism. In some respects, one might argue, Shakespeare was more medieval than Chaucer. Chaucer may be more satirical of romantic love.

The problem of *Troilus and Cressida* arises. This would seem to be Shakespeare's most satirical, even bitter play. Thompson argues that in his play Shakespeare distorts Chaucer, deliberately omitting the compensating realm of higher values that Chaucer, if only marginally, invokes in the poem. She even sees the bitterness of the play as sometimes a bitterness against Chaucer himself, for having an easier access to "Christianity" than was available to Shakespeare himself. The thematic emphasis of Chaucer's *Troilus* may well have influenced the abstract and intellectual elements of Shakespeare's play, but "influence" in the more direct and obvious sense is hard to argue for when the outcome is so different.

In *Troilus and Cressida* there is probably more than is usually allowed for of another medieval element, the clerically-inspired condemnation of "wars and lechery", certainly found in Chaucer, but also often elsewhere. All medieval writers seem to have condemned Paris and Helen and the carnal ethos of sex and violence that they represent.

In such questions we go far beyond the problem of direct sources, as Thompson recognizes. We have to treat subtle matters of comparative literary achievement. Elizabethan writers, and perhaps Shakespeare himself, were sometimes ambivalent about Chaucer, and Thompson shows this in her introductory chapter, then dividing her investigation quite clearly and fairly between the establishment of specific references and the consideration of wider influences.

In the end, the question of Shakespeare's specific indebtedness to Chaucer is hard to answer. Take Chaucer away, how much the less would Shakespeare be? How "Chaucerian", how "medieval", is Shakespeare?

D. S. Brewer

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NOTICE BOARD

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Chairs

Mr John Richard Watson, senior lecturer at the University of Leicester has been appointed to the chair of English at the University of Durham. He will take up his position on October 1, 1978.

Mr Charles Jones, lecturer at University of Edinburgh, has been appointed to the chair of English at the University of Durham. He will take up his position on January 1, 1979.

Dr G. T. S. Done, senior lecturer in the department of mechanical engineering and head of the postgraduate school of applied dynamics, University of Edinburgh, has been appointed to the chair of applied mechanics in the department of mechanical engineering at City University from August 1, 1978.

Mr Bernard Rudden, lecturer in European Law and fellow of Oriel College, University of Oxford, has been appointed to the chair of comparative law from October 1, 1979.

Recent publications

All the publications issued in 1977 by the Department of the Environment and the Department of Transport are included in the seventh edition of the *Annual List of Publications* published this month. The list provides the key guide to hundreds of departmental publications which do not appear on the HMSO list, and can be difficult to trace. The list covers town and country planning, housing, construction, transport, local government, water supply and sewerage as well as all aspects of pollution and environmental protection. Available from the DOE/DTP Sub-Library, Building 6, Victoria Road, South Ruislip HA4 0NZ, £1.00.

Appointments

Universities

Bradford

Lecturers: R. F. Jones (archaeology); P. R. D. Wilson (economics); J. C. B. Taylor (literature, interdisciplinary human studies); Mrs O. V. E. Foster-Carter (social psychology). Temporary lecturers: D. J. Burcher (organizational sociology); S. M. Clift (social psychology); P. D. Coates (manufacturing systems, engineering). Fellow: G. T. Devlin (theatre). Research fellow: J. H. Shea (archaeological sciences). Lectrices in French: M. J. Allaga and O. J. Rousseau. Lecteurs in French: P. Picot, L. Mandeguer and P. A. Beacco. Lector in German: M. Ludwig. Lector in German: C. H. *Freitag. Visiting professor: N. G. Eley (technological management).*

Durham

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Leeds

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Research fellow: Mr Crocker (inorganic and structural chemistry); A. Evans (Astbury department of biophysics); P. E. Goward (child dental health); G. I. Jenkins (genetics); R. F. Kerr (pure and applied zoology); M. N. A. Rahaman (ceramics). Gregory fellow in poetry: P. Mills (school of English); Guest fellow and lecturer in the Workshop Theatre: Professor E. Hill. Careers adviser in the Career Service: C. Newton.

Leicester

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Oxford

Heasley Henson lecturer in theology: The Revd John Norman Davidson Kelly. Speaker's lecturer in biblical studies: The Revd G. W. Anderson. Reader: David H. Hargreaves (education).

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Reader: Robert Sugden (economics). Personal reader: Dr John Barnes Foster (clinical neurology); Dr Trevor John Saunders (Greek philosophy, faculty of arts). Senior Lecturer: Dr P. H. Gordon (child dental health). Lecturers: Miss F. A. R. Wyatt (oral surgery); Miss E. A. Skinner (arts); T. R. Wright (English); Dr R. M. Frank (geography); A. V. Metcalfe (engineering mathematics); Dr R. Lesser (education); D. J. Greig (agricultural engineering).

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Forthcoming events

"Ethics for Science Policy" the ... Nobel scientific symposium organized by the Royal Swedish Academy of Sciences is to be held from August 21 ... Sodergarn Lidingo outside Stockholm. Topics to be covered include: Science, its philosophy, its impact on world ... and ethical attitudes; priorities ... control in the organization of research; ethics in "big science" and the ... formation problem in science. Further information from the Royal Swedish Academy of Sciences, Information Department, Fack S-104 05 Stockholm, Sweden.

* * *

A short course on ergonomics for designers and users of computer systems is being held at Loughborough University from September 19-24. Topics included are hardware, environment, software, the user's task, user support and training, organizations and computers and the system design process. A key feature will be workshop sessions on topics or problems selected by course participants to help them improve their own systems. Further enquiries to Tom Stewart or John Wilcox, department of human sciences, Loughborough University.

* * *

A course on teaching and learning in higher education jointly organized by the Universities of Surrey and ... will be held from September 11 ... the University of Surrey. The course is designed for all higher education teachers irrespective of subject who have a minimum of one year's experience. Topics will include ... and curriculum development, ... TV and tape/slides and assessment and examinations. Fee: £130. Further details from Miss D. Gray, course administrator, Institute for Educational Technology, Surrey University.

Open University programmes August 12 to 18

Saturday August 12

BBC 1
7.15 History of mathematics: New Worlds from Old (AM289; prog 9).
7.40 Geophysics: Cyprus—A Geophysical Case Study (S2-3; prog 5).
8.05 Linear mathematics: Boundary Value Problems (M201; prog 25).

BBC 2
7.40 Twentieth century poetry: Robert Lowell (A306; prog 17).
8.00 Technology foundation course: Chemical Processes — Aluminium in Anglesey (T100; prog 20).
8.30* Arts foundation course: Industrial Society (A101; prog 21).
8.55* Urban development: An Overview (D7204; prog 11).
9.20* Fundamentals of statistical inference: Weights, Measures & Statistics (M341; prog 6).
9.45 Problems of philosophy: Laws of Nature and Explanation (A303; prog 10).
10.10 Statistics: an interdisciplinary approach: Linear Regression (MDST242; prog 8).
10.35 Structures under stress: Design for Life (T351; prog 11).
11.00* Ecology: Ants and Acacias (S323; prog 21).
11.25 The nature of chemistry: Organo-carbon Compounds (S304; prog 23).
11.50* Economics and education policy: Finance in Education (ED322; prog 4).
12.15 Drama: "Six Characters in Search of an Author" (A307; prog 12).
13.05* History of architecture and design 1890-1939: Edwin Lutyens, Deanery Gardens (A305; prog 18).
13.30* Numerical computation: Cubic Splines; Road Design Case Study (M351; prog 6).
13.55 Mathematics foundation course: Modelling Drug Therapy (M101; prog 23).
14.40 People and work: The Consultant (DE351; prog 10).

RADIO 3 (VHF)
6.00 Integration and normed spaces: Hilbert Space (M331; prog 7).
6.20* Urban development: Social Perception and Housing: Chicago (D1201; prog 21).
6.40 The age of revolutions: Beethoven in an Age of Revolution (A202; prog 20).
7.00 Technology foundation course: A Shelter on your Doorstep (T100; prog 25).
7.20* Arts foundation course: Mersey: Eccles and Manchester (A101; prog 21).
7.40* Complex analysis: Uniform Convergence (M332; prog 6).

RADIO 4 (VHF)
Not on north Scottish and Welsh transmitters
9.05 Open Forum 26.
9.20 Man's religious quest: Confronting Suffering and Evil (AD208; prog 19).
9.40* Cognitive psychology: The Perceptive Computer (D303; prog 8).
10.00 Language and learning: Deprivation (E262; prog 12).
10.20 Comparative government and politics: Radio Tutorial (TMA 3) (D231; prog 6).
10.40 Elements of music: Harmonic Analysis (4) (A241; prog 12).
11.00* Social Psychology: Social Skills: An Introduction (D305; prog 12).
11.20* The development of instruments and their music: Twentieth Century Music: Extracts (1) (A304; prog 12).
11.40* Twentieth century poetry: "I Just Wish as you Depart"—W. H. Auden and Light Verse (A306; prog 13).
14.00 Renaissance and reformation: Thomas Cranmer (A201; prog 25). Reformation studies: Thomas Muntzer (PA981; prog 6).
14.20* People and organizations: Army (2) (DT352; prog 6).
14.40* Personality and learning: Cultural Bias in Children's Books (E201; prog 21).
15.00 Patterns of inequality: Political Independence and India: Control (D302; prog 25).
15.20* Curriculum design and development: Portrait of Countesthorpe College (E203; prog 10).
15.40* Environmental control and public health: Noise: While You Work (PT272; prog 15).
16.00* Genetics: The Biometrical Approach (S299; prog 11).
16.20 Industrial relations: The Pit Community (P881; prog 7).
16.40* Control of technology: Community Technology: The Washington Sugar Factory (T361; prog 6).

RADIO 3 (VHF)
Alternative broadcasts for north Scottish and Welsh transmitters
24.00* Language and learning: Deprivation (E262; prog 12).
00.20* Cognitive psychology: The Perceptive Computer (D303; prog 8).
00.40* Man's religious quest: Confronting Suffering and Evil (AD208; prog 19).

Sunday August 13

BBC 1
7.15* Twentieth-century poetry: Robert Lowell (A306; prog 15).
7.40 Patterns of inequality: International Aid (D302; prog 15).

BBC 2
7.40* Making sense of society: Power in Society: San Francisco Bay Area Rapid Transit: "Assembling the Power Structure" (D101; prog 22).
8.05 Science foundation course: Continental Drift and Sea Floor Spreading (S100; prog 27).
8.30* Mathematics foundation course: Modelling Drug Therapy (M101; prog 23).
8.55 Man-made futures: design and technology: Design Strategies (T262; prog 9).
9.20 Systems management: Understanding, Monitoring, Manipulating (T242; prog 9).
9.45 Elementary mathematics for science and technology: Introducing Vector Spaces (MST281; prog 15).
10.10 Topics in pure mathematics: Turing Machines and Post Systems (M202; prog 25).
10.35 Drama: "St. Joan" (A307; prog 17).
11.25 Open Forum 27: Research in the OU.
11.50 Computing and computers: Practical Computer Systems (PM951; prog 10).
12.15 Science and the rise of technology since 1800: The Explosives Industry (AST281; prog 8).
12.40 Regional analysis and development: Government Control of Regional Development (D342; prog 7).
13.05 Education, economy and politics: Educate Together (E353; prog 6).
13.30 Microeconomics: Income Distribution (D222; prog 7).

RADIO 3 (VHF)
10.00* Renaissance and reformation: Thomas Cranmer (A201; prog 25). Reformation studies: Thomas Muntzer (PA981; prog 6).
6.20 Biochemistry and molecular biology: Concepts in Immunology (S322; prog 12).
6.40* Environmental control and public health: Noise: While You Work (PT272; prog 15).
7.00 Making sense of society: Power in the City (D101; prog 27).
7.20 Science foundation course: Revolution in Earth's Sciences (S100; prog 25).
7.45 Open Forum 26.

RADIO 4 (VHF)
0.10 War and Society: BBC and World War 2: Allies and Enemies (A301; prog 13).
0.30 International politics and foreign policy: Image and Evidence: An Evaluation of the Television Programmes (D332; prog 15).
0.50 Problems of philosophy: Freedom and Foreknowledge: a dialogue between Leibniz and Arnauld (A303; prog 10).
10.10 History of mathematics: The Leibnizian Tradition (AM289; prog 9).

RADIO 3 (VHF)
24.00* History of architecture and design 1890-1939: Frank Pick (A305; prog 20).
00.20 Fundamentals of human geography: Can Small Area Policies Help? (D204; prog 9).
00.40 Modern art from 1848 to the present: styles and social implications: Dada Voices (A351; prog 15).

Monday August 14

BBC 1
6.40 Cognitive psychology: The Automated Tutor (D303; prog 12).
7.05 Personality and learning: Nurture Groups (E201; prog 14).
7.30* Computing and computers: Practical Computer Systems (PM951; prog 10).

BBC 2
6.40 Systems behaviour: Sheep Production (T241; prog 12).
7.05 Quantum theory and atomic structure: The Atomic Clock (SM351; prog 8).
7.30 Physiology of cells and organisms: Physiological Adaption II (S321; prog 13).
6.35* Technology foundation course: Chemical processes: Aluminium in Anglesey (T100; prog 20).

RADIO 3 (VHF)
0.00 Telecommunication systems: Composite Video Signals and Scanning (T321; prog 6).
6.20 An introduction to materials: The Designer's Knowledge of Polymers (TS251; prog 4).
6.40* Man's religious quest: Confronting Suffering and Evil (AD208; prog 19).
17.45 People and organizations: The Military Self-Image (DT352; prog 7).
18.05 National income and economic policy: Economic Policy and the Labour Government of 1964-1970 (D283; prog 13).
18.25 Linear mathematics: Fourier Series (M201; prog 13).
18.45 Regional analysis and development: Government Action to control Regional Development (D342; prog 7).
19.05 OU Announcements/Music Fill.
19.10* Making sense of society: Power in the City (D101; prog 25).

Alternative broadcasts for north Scottish and Welsh transmitters
24.00* People and organizations: Army (2) (DT352; prog 6).
00.20* The development of instruments and their music: Twentieth Century Music: Extracts (1) (A304; prog 12).
00.40* Elements of music: Harmonic Analysis (4). (A241; prog 12).

Tuesday August 15

BBC 1
6.40 The development of instruments and their music: Bartok and the Modern String Quartet (A304; prog 12).
7.05 Social psychology: Social Skills Therapy (2) (D305; prog 13).
7.30 Solids, liquids and gases: Thermodynamics (2) (ST285; prog 12).

BBC 2
6.40 Integration and normed spaces: Convergence and Normed Spaces (M331; prog 7).
7.05 Biological bases of behaviour: Memory and Forgetting (SD286; prog 13).
7.30 Education and the urban environment: We're all Immigrants Here (E361; prog 6).
6.10 Renaissance and reformation: From Altar to Pulpit. Reformation Studies: From Altar to Pulpit (A201; prog 13) (PA981; prog 15).
6.35* Science foundation course: Continental Drift and Seafloor Spreading (S100; prog 27).

RADIO 3 (VHF)
0.00 Oceanography: Upwelling, El Nino (S334; prog 10).
6.20* Language and learning: Deprivation (E262; prog 12).
6.40* Comparative government and politics: Radio Tutorial (TMA 3) (D231; prog 6).
17.45 The nature of chemistry: Organometallic Chemistry—A Discipline or a Meeting Point? (S304; prog 19).
18.05 People and work: General Practice (DE351; prog 12).
18.25 Art and environment: Nomadic Art (TAD292; prog 10).
18.45 Elementary mathematics for science and technology: What is a Mathematical Structure (MST281; prog 7).
19.05 OU Announcements/Music Fill.
19.10 Arts foundation course: The War with Rude Nature (A101; prog 25).

Alternative broadcasts for north Scottish and Welsh transmitters
24.00* Personality and learning: Cultural Bias in Children's Books (E201; prog 21).
00.20* Renaissance and reformation: Thomas Cranmer (A201; prog 25). Reformation Studies: Thomas Muntzer (PA981; prog 6).
00.40* Social Psychology: Social Skills: An Introduction (D305; prog 12).

Wednesday August 16

BBC 1
6.40 Reading development: A Wealth of Words (PE231; prog 7).
7.05* Drama: "St Joan" (A307; prog 17).

BBC 2
6.40 An introduction to materials: Car Bodies (TS251; prog 11).
7.05 The nature of chemistry: Ferrocene (S304; prog 23).
7.30 Elements of music: Harmonic analysis, 2 (A241; prog 9).
11.25* Industrial Relations: "Bloody Good Colliers" (P881; prog 5).
16.55* Personality and learning: Nurture Groups (E201; prog 13).
17.20* Earth science topics and methods: Porphyry Copper Deposits (S333; prog 12).
17.45* Solids, liquids and gases: Thermodynamics (2) (ST285; prog 12).
18.10* Biochemistry and molecular biology: Signals and Receptors (S322; prog 12).
18.35* Arts foundation course: Leeds—A Study in Civic Pride (A101; prog 23).

RADIO 3 (VHF)
6.00* International politics and foreign policy: Images and Evidence: An Evaluation of the Television Programmes (D332; prog 15).
6.20* Industrial relations: The Pit Community (P881; prog 7).
6.40 The nineteenth-century novel and its legacy: Tolstoy's View of Art and Morality (A302; prog 15).
17.40 Urban development: The Socialist City (D1204; prog 25).
18.05* Historical data and the social sciences: No Safety in Numbers (D301; prog 21).
18.25 Decision-making in Britain: The Central Unit on Environmental Pollution (P120; prog 20).
18.45 Second-level biology: Experimental Approaches to Anorexia (S2-B10; prog 10).
19.05 OU Announcements/Music Fill.
19.10 Mathematics foundation course: Foundation Maths 13 (M101; prog 13).

Alternative broadcasts for north Scottish and Welsh transmitters
24.00 Principles of chemical processes: Chain Reaction Mechanisms (S1264; prog 6).
00.20* Curriculum design and development: Portrait of Countesthorpe College (E203; prog 10).
00.40* Patterns of inequality: Political Independence and India: Control (D302; prog 25).

Thursday August 17

BBC 1
6.40 Principles of chemical processes: Rates of Chemical Reactions (S1264; prog 12).
7.05 Biochemistry: Purification of an Enzyme (S2-1; prog 2).
7.30 Oceanography: Shoreline Processes (S334; prog 11).

BBC 2
0.40 Drama: "Six Characters in Search of an Author" (A307; prog 12).
7.30* People and work: The G... (DE351; prog 10).
16.55* Quantum theory and atomic structure: The Atomic Clock (SM351; prog 8).
17.20* Linear mathematics: Boundary Value Problems (M201; prog 25).
17.45* The development of instruments and their music: Bartok and the Modern String Quartet (A304; prog 12).
18.10* Reading development: "A Wealth of Words" (PE231; prog 7).
18.35* Making sense of society: San Francisco Bay Area Rapid Transit: "Assembling the Power Structure" (D101; prog ...).

RADIO 3 (VHF)
0.00* Elements of music: Harmonic Analysis (4) (A241; prog 12).
0.20 Mass communication and society: Writing a Road Script (DE353; prog 13).
0.40 Personality and learning: Gender Stereotypes (E201; prog 23).
17.45* Integration and normed spaces: Hilbert Space (M331; prog 7).
18.05* People and organizations: The Military Self-Image (DT352; prog 7).
18.25* An introduction to materials: The Designer's Knowledge of Polymers (TS251; prog 4).
18.45 Ecology: How a Research Team Thinks (S323; prog 4).
19.05 OU Announcements/Music Fill.
19.10 Technology foundation course: A Shelter on your Doorstep (T100; prog 25).

Alternative broadcasts for north Scottish and Welsh transmitters
24.00* The nineteenth-century novel and its legacy: Tolstoy's View of Art and Morality (A302; prog 15).
00.20* Comparative government and politics: Radio Tutorial (TMA3) (D231; prog 6).
00.40* Open Forum 26.

Friday August 18

BBC 1
0.40* Renaissance and reformation: From Altar to Pulpit. Reformation Studies: From Altar to Pulpit (A201; prog 13) (PA981; prog 15).
7.05* Geophysics: Cyprus—A Geophysical Case Study (S2-3; prog 5).
7.30* Biochemistry and molecular biology: An Overview of Immunology (1) (S322; prog 15).

BBC 2
0.40 Telecommunication systems: "Teletext" (T321; prog 13).
7.05* Patterns of inequality: International Aid (D302; prog 15).
16.55* Social psychology: Social Skills Therapy (2) (D305; prog 13).
17.20* Biochemistry: Purification of an Enzyme (S2-1; prog 2).
17.45* Systems behaviour: Sheep Production (T241; prog 12).
18.10* Biological bases of behaviour: Memory and Forgetting (SD286; prog 13).
18.35* Principles of chemical processes: Rates of Chemical Reactions (S1264; prog 12).

RADIO 3 (VHF)
6.00 Soviet government and politics: Soviet Political Culture (D333; prog ...).
6.20* Patterns of inequality: Political Independence and India: Control (D302; prog 25).
6.40* People and work: General Practice (DE351; prog 12).
17.45* The age of revolutions: Beethoven in an Age of Revolution (A202; prog 20).
18.05* Public administration: Administrative Tribunals (D331; prog 9).
18.25 Fundamentals of human geography: Can Small Area Policies Help? (D204; prog 9).
18.45 Numerical computation: Monte Carlo Methods (M351; prog 7).
19.05* Science foundation course: Revolution in Earth's Sciences (S100; prog 25).

Alternative broadcasts for north Scottish and Welsh transmitters
24.00 Decision making in British education systems: School and Community (E221; prog 15).
00.20* Industrial relations: The Pit Community (P881; prog 7).
00.40 Telecommunication systems: Composite Video Signals and Scanning (T321; prog 6).

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Universities

UNIVERSITY OF GUYANA

Institute of Development Studies

Vacancies Caribbean Technology

Policy Studies Project

The Institute of Development Studies, University of Guyana, and the Institute of Social and Economic Research, University of the West Indies, are jointly about to embark on a second phase of multi-disciplinary studies on Caribbean Technology Policy lasting 2½ years and commencing October 1, 1978. Applications are invited for the following two research posts, tenable at the University of Guyana:

Research Fellow (1)

The appointment is for two years in the first instance and the researcher will be asked to undertake a study of *the issues relating* to the Development of a Technological *Capability in the* Caribbean. Postgraduate training and or *research experience* will be an advantage.

Research Assistant (1)

The appointment is for two years in the first instance. Only those with a good first degree or postgraduate experience will be considered.

The successful applicants for the two posts are required to be social scientists who are prepared to be members of a research team that includes engineers and natural scientists.

Salary scale (per annum)

Research Fellow—UA3: GUY$9,000.00 x $480.00 to $14,760.00 per annum.

Research Assistant—UA4: GUY$6,120.00 x $420.00 to $8,640.00 per annum.

Benefits including housing allowance, gratuity at 20% of basic salary, contributory medical scheme and terminal leave. Anyone recruited from overseas will receive up to four full economy air fares from point of recruitment (i.e. for himself/herself, spouse and unmarried children up to 18 years of age), limited removal expenses and a settling-in allowance.

Applications (3 copies) stating name, date of birth, marital status, qualifications with dates obtained, work experience (with dates), names and addresses of three referees (one of the referees (one of the referees must be your present or last employer where applicable), must reach the Personnel Division, University of Guyana, P.O. Box 841, Georgetown, Guyana, before 21st August, 1978.

Personnel Division, 21st July, 1978

SPECIAL BOOK NUMBERS FOR THE AUTUMN

Special Book Numbers scheduled for publication in the THES in September and October are:

Economics	Sept. 15
Sociology	Sept. 22
Mathematics and Physics	Sept. 29
History	Oct. 6
Education	Oct. 13
Medicine and Biology	Oct. 20

Publishers wishing to book advertisements in these issues should contact David Hunt, Advertisement Manager—Times Higher Education Supplement, on 01-837 1234 as early as possible.

The Times Higher Education Supplement

TEACHING APPOINTMENTS

UNIVERSITY OF SINGAPORE

and

NANYANG UNIVERSITY

Applications are invited for teaching appointments, ranging from Lectureships to Professorships, in the School of Accountancy & Business Administration of the University of Singapore and the Faculty of Commerce of Nanyang University. Candidates should possess a professional qualification in Accountancy and/or a Master's degree in Business Administration or Commerce or a Master's degree in Law. Preference will be given to candidates with professional and/or teaching and research experience in one or more of the following areas as indicated for each University:

UNIVERSITY OF SINGAPORE: Financial Accounting; Cost & Management Accounting; Auditing and Business Investigation; Quantitative Techniques in Management; Business/Commercial Law; Personnel Management and Industrial Relations; Financial Management; Organizational Behaviour; Business Policy & Administration.

NANYANG UNIVERSITY: Financial Accounting; Business Law; Principles of Marketing/International Marketing; International Financial Management; Organizational Behaviour/Theory; International Business. Candidates should indicate the subjects in which they are competent to teach including their areas of specialisation. Gross monthly emoluments in the range from S$1,445 to S$3,045 approx., point of entry depending on the candidate's qualifications and experience and level of appointment offered. In addition, the University pays a 13th month annual allowance of one month's salary in December of each year. Leave, subsidized housing, medical and provident fund benefits are available. FOR ALL APPOINTMENTS, SUCCESSFUL APPLICANTS MUST BE PREPARED TO TEACH AT BOTH UNIVERSITIES. Candidates should write to the Registrar, University of Singapore, Kent Ridge, Singapore 5, or Registrar, Nanyang University, Singapore 22 (as applicable) giving curriculum vitae (bio-data) with full personal particulars and also the names and addresses of three referees. (Candidates should duplicate applications if they wish to apply to both Universities.)

UNIVERSITY OF DUBLIN
Trinity College

NEW CHAIR

in the area of

BUSINESS AND ADMINISTRATIVE STUDIES

Persons seeking further particulars relating to this new post may write, in confidence, to G. H. H. Giltrap, Secretary to the College, Trinity College, Dublin 2, to whom formal applications should be sent before September 30, 1978.

ABERYSTWYTH
THE UNIVERSITY COLLEGE OF WALES

PROFESSOR OF AGRICULTURE

Applications are invited for the above Chair, tenable from the earliest mutually convenient date after 1st October, 1978.

Salary within Professorial range (minimum £8,900 per annum—under review).

Further particulars available from the Registrar to whom applications (12 copies) with the names of three referees should be sent not later than 29 September, 1978.

The University of Papua New Guinea
(PORT MORESBY)

TEACHING POSITIONS IN THE DEPARTMENT OF ANTHROPOLOGY & SOCIOLOGY

Applications are invited for the following positions in the above Department. The Department teaches a wide range of courses in Prehistory, Anthropology, Sociology, Social Policy and Social Work, and it is intended a major focus of interest should be in the areas of the Anthropology/Sociology of Development and Social Planning.

The Arts Faculty has a common First Year of interdisciplinary study which emphasises team teaching; preference will be given to applicants with relevant experience.

1. LECTURER/SENIOR LECTURER IN PREHISTORY OF THE PACIFIC (Jan., 1979)

The appointee will probably spend half of his/her teaching time in interdisciplinary courses such as the History of Science and Technology and Human Studies.

2. LECTURER/SENIOR LECTURER IN ANTHROPOLOGY/SOCIOLOGY OF DEVELOPMENT, SOCIAL POLICY, SOCIAL PLANNING, COMMUNITY DEVELOPMENT & RESEARCH METHODS (TWO POSITIONS) (Jan., July, 1979)

The appointees will spend some of their time teaching courses in the common First-Year Programme (Foundation Year). It is expected that one appointee shall share responsibility for the social work degree programme with the Department.

SALARIES: Senior Lecturer: K14,129-K15,316 p.a. Lecturer, Grade 2: K10,159-K13,018 p.a. (£1 sterling = K1.35). In addition, an allowance of K1,300 pa if single is payable. An extra K1,000 Marriage Allowance and K150 per child Child Allowance may also be payable. Applications should include detailed curriculum vitae, a recent small photograph and the names and addresses of three referees. Conditions include provision of housing, annual leave fares and FSSU superannuation. Further details and the conditions of appointment are available from the Secretary, Box 4820, University PO, Papua, New Guinea, with whom applications close on 1st September, 1978. Applicants resident in the UK should also send one copy to the Inter-University Council, 90-91 Tottenham Court Road, London W1P 0DT, from whom further information is also available.

UNIVERSITY OF STIRLING
REGISTRAR'S OFFICE

ADMINISTRATIVE ASSISTANT

Applications are invited for the post of Administrative Assistant from 1st January, 1979. Candidates should have a good honours degree or an equivalent qualification and should have some previous relevant administrative experience. Duties will be of a general administrative nature, including committee servicing and may include responsibility for work in the area of students' assessment and progress.

Salary on the Administrative Grade 1A, £3,189-£6,178 with membership of the Universities Superannuation Scheme.

Applications, giving details of age, qualifications and experience, together with the names of three referees should be sent not later than 28th August, 1978, to the Secretary (THES), University of Stirling, Stirling FK9 4LA, from whom further particulars may be obtained.

UNIVERSITY OF NATAL
DEPARTMENT OF ACCOUNTANCY, DURBAN

Applications are invited from suitably qualified persons, regardless of sex, religion, race, colour or national origin, for appointment to the posts of

SENIOR LECTURER
REFERENCE D40/78

LECTURER

A subvention is payable by the Public Accountants' and Auditors' Board in its discretion to Chartered Accountants who are engaged full-time as Senior Lecturers in the teaching of accountancy students at South African universities.

The salary scales attached to the posts are:
Senior Lecturer: R8,820 x 360-R9,900 x 450-R11,250, plus 15½% per annum.
Lecturer: R6,300 x 360-R9,180, plus 15½% per annum.

The commencing salary notch will be dependent on the qualifications and/or experience of the successful applicant. In addition, an annual vacation savings bonus is payable, subject to Treasury regulations.

Application forms, further particulars of the post and information on pension, medical aid, group insurance, staff bursary, housing loan and subsidy schemes, long leave conditions and travelling expenses on first appointment are obtainable from the Registrar, University of Natal, King George V Avenue, Durban, with whom applications, on the prescribed form, must be lodged not later than 30th September, 1978, quoting the relevant reference.

UNIVERSITY OF MALAWI
CHANCELLOR COLLEGE

Applications are invited for the post of **SENIOR LECTURER/LECTURER IN PHILOSOPHY,** tenable as soon as possible. Preference will be given to applicants with a higher degree in philosophy and whose interests include the philosophy of the social sciences, epistemology and modern philosophy. The appointee will be expected to relate philosophy to other disciplines rather than teach very narrow specialisms. Research is encouraged and suggestions for new courses in philosophy welcomed. Salary scales (for non-domiciled staff): Senior Lecturer, K6,600-K8,000 p.a. Lecturer, K3,600-K6,600 p.a. plus an expatriate addition of between K1,640-K1,090 p.a. for Senior Lecturer and between K1,320-K1,056 p.a. for Lecturer (£1 sterling = K1.57). Gratuity of 15%-25%; superannuation scheme transferable with FSSU; family passage; various allowances; biennial overseas leave; housing. Detailed applications (2 copies) with curriculum vitae and naming three referees to be sent to Registrar, University of Malawi, P.O. Box 278, Zomba, Malawi, by 11th September, 1978. Applicants resident in the UK should also send one copy to Inter-University Council, 90/91 Tottenham Court Road, London W1P 0DT. Further details may be obtained from either address.

THE CITY UNIVERSITY
CHAIR OF ORGANIC CHEMISTRY

Applications are invited for the above post in the Department of Chemistry.

The salary will be in the range for professorial appointments and there will be a London allowance of £450 per annum. Superannuation will be in accordance with the provisions of U.S.S.

Further particulars may be obtained from the Academic Registrar, The City University, St. John Street, London, EC1V 4PB. The closing date for application is 9th October, 1978. Please quote reference ... TFB.

Colleges and Institutes of Technology

ABERDEEN
ROBERT GORDON'S INSTITUTE OF TECHNOLOGY

SCHOOL OF ELECTRONIC AND ELECTRICAL ENGINEERING

LECTURER

Honours Graduate in Electronics/Electrical Engineering with Industrial/Research experience for Honours Degree Course in one of the following areas:

(i) *Control Systems*
(ii) *Electronic Systems*
(iii) *Electrical Machines and Industrial Plant*

Salary scale in range £4,056-£7,698 per annum. Assistance with removal expenses.

Details from Chief Administrative Officer, Robert Gordon's Institute of Technology, Schoolhill, Aberdeen, AB9 1FR (0224-574511).

LOTHIAN REGIONAL COUNCIL
Napier College of Commerce and Technology

Senior Lecturer in Management

(Human Resources)
Salary on scale £7,098-£7,899 (Bar)-£8,967

Applicants should possess a degree/honours degree and/or equivalent professional qualifications and preferably have had industrial, research or teaching experience.
Further particulars and application forms from: The Academic Registrar, Napier College of Commerce and Technology, Colinton Road, Edinburgh, EH10 5DT.

PAISLEY COLLEGE

DEPARTMENT OF MATHEMATICS AND COMPUTING

Associate Head of Department in Computing

Applicants should have substantial experience in relevant fields of Computing or Computer Science. The appointment is at professorial level and the successful applicant will have corresponding academic and administrative responsibilities.
The responsibilities will include leadership of the degree and honours degrees in Computing and the development of future courses in this field; the development of research work and of consultancy with industry and commerce.

Lecturer in Computer Science

Applicants should possess a broad general background in the subjects of Computer Science and preferably have specialised knowledge or research interests in the areas:
Communications (Networks and Data Transmission).
Real-time.
Applicants should preferably have some significant industrial experience.

Lecturer in Engineering Mathematics

Applicants should have strong interests in teaching and applying mathematics to practical problems in science and engineering and preferably have expertise in at least one of the areas:
Modern applications of (ordinary) differential equations.
Applications of stochastic processes to engineering problems.
The successful applicant will be expected to pursue relevant research work and consultancy work with industry and commerce.

Salary: Associate Head £10,011 p.a.
Salary: Lectureships—will be within the range £4,656-£7,698 p.a.
Application forms and further particulars are available from Establishment Section, Paisley College of Technology, High Street, Paisley PA1 2BE (telephone: 041-887 1241, ext. 234). Please quote Ref. THES.16/1. Closing date 4th September, 1978.

LOTHIAN REGIONAL COUNCIL

NAPIER COLLEGE OF COMMERCE AND TECHNOLOGY

LECTURER (A) in PHYSICAL CHEMISTRY

Salary on Scale £4,099 to £7,110 (Bar) to £7,651

Required to teach courses at Diploma Degree level and Interdisciplinary Degree courses. An interest in industrial applications of physical chemistry and the social responsibilities of the scientist would be an advantage.

Applicants should possess an honours degree and/or equivalent professional qualifications and preferably have had industrial, research or teaching experience.

Further particulars and application forms from: The Academic Registrar, Napier College of Commerce and Technology, Colinton Road, Edinburgh EH10 5DT.

Miscellaneous

LONDON
INNER LONDON EDUCATION AUTHORITY
THE SCHOOLS ARTS SERVICE DIVISION

Salary Range: £6,264 to £7,206 (inclusive of all allowances).

This post is attended by the Director of the City of London Polytechnic Computer Centre. The person appointed will work with Computer Managers in the responsible for the day-to-day service to the secondary schools and colleges of further education. Interactive facilities are provided and a Burroughs 6700 which will shortly be enhanced to almost double up to 20 simultaneous users. There is a team of support staff working in the department.

The Authority is committed to developing computer education in the schools and colleges and the person appointed will have an interest in all aspects of this development.

Application forms and further details from the Assistant Officer, 20 Bartholomew Close, EC1A 7HN. County Hall, London SE1 7PB.

Please enclose a large stamped addressed envelope for reply.

Completed forms to be returned not later than 30th August, 1978.

Administration

OXFORD
THE UNIVERSITY

APPOINTMENT OF AN ADMINISTRATIVE OFFICER

Applications are invited from Graduates for an administrative post in the University Offices which provides the central administration of this university. Salary on Administrative Scale 1A (at present £5,109 to £6,570 per annum), the starting point depending on age and experience.

Further particulars should be obtained from the Deputy Registrar (Administration), University Offices, Wellington Square, Oxford, OX1 2JD to whom applications should be sent by not later than 28th September, 1978.

WOLVERHAMPTON
THE POLYTECHNIC

ADMINISTRATIVE ASSISTANT

Applications are invited for the post of ADMINISTRATIVE ASSISTANT in the Vocational Education Development Unit of the Faculty of Science.

Applicants should preferably be graduates but a science background is not required.

Salary scale AIA of £5,739 to £6,852 per annum.

Application forms and details from Establishment Officer, The Polytechnic, Wolverhampton, WV1 1LY. Tel. (0902) 27771.

BANGOR
UNIVERSITY COLLEGE OF NORTH WALES

Applications are invited for two ADMINISTRATIVE POSTS within the Registry, to commence as soon as possible.

Applicants for either appointment should have a good Honours degree and preferably some relevant experience in respect of the more senior position.

(1) ASSISTANT REGISTRAR
This appointment, in the Administrative Staff Grade II scale (£5,061 to £6,726 per annum), will initially carry responsibility for the administration of the College's Halls of Residence for 170 students.

(2) ADMINISTRATIVE ASSISTANT
This appointment, in the Administrative Staff Grade 1A Scale (£4,206 to £5,178 per annum), will be initially in the College's Bursary Office, but the person appointed will be required to work, as necessary in any section of the Registry.

Applications (two copies), giving details of qualifications and experience, together with the names and addresses of three referees, should be sent to the Assistant Registrar (Personnel), University College of North Wales, Bangor, Gwynedd LL57 2DG, from whom further particulars may be obtained.

Closing date for applications August 31st, 1978.

Colleges of Further Education

SCHOOL OF TECHNOLOGY AND DESIGN

SENIOR LECTURER IN FASHION

The successful applicant will be responsible for the co-ordination of the Fashion area within the Division of Art and Design.
The College has recently been approved by the CNAA to run a B.A. degree in Art and Design commencing in September 1978.
Fashion is a major component within this degree which is a unique generalist degree being the only one of its kind in England.
A two year YHCFE course in Fashion is also contained within the Division.
Candidates should possess an appropriate qualification such as ARCA, DESRCA, or BA (Fashion) or equivalent, and have suitable experience, preferably in education and/or industry.
The salary for this post will be in accordance with the Burnham Scales of Salaries for Teachers in Establishments of Further Education, Senior Lecturer Grade: £9,051-£7,053 (Bar)-£7,572.
Application forms and further particulars are available from Staffing Officer, Bradford College, Great Horton Road, Bradford BD7 1AY, and completed forms should be returned not later than 25th August, 1978.

Bradford College

Colleges of Education

ST. ANGELA'S COLLEGE OF EDUCATION FOR HOME ECONOMICS
(Recognised College of the National University of Ireland)
Lough Gill, Sligo

TWO LECTURESHIPS

Applications are invited for a permanent whole-time post in each of the following Departments:

(a) EDUCATION
(It is desirable that applicants for this post have Sociology of Education or Philosophy and History of Education among their qualifications.)

(b) FOOD SCIENCE

Salary Scale: £5,614-£7,586 (subject to review).
Applicants are requested to forward the following on or before August 22nd.
(a) Detailed Curriculum Vitae.
(b) Names and addresses of two referees.
Applications to be addressed to: The Principal's Office, St. Angela's College of Education for Home Economics, Lough Gill, Sligo.

Personal

PERSON

Mid-30s upwards to join mixed community house in Greenwich. Own room, £6 pw. Sharing chores. Would welcome children, but not essential. 0689 857009.

POSTALOANS UNSECURED

£50 to £1,500

RICHMOND INVESTMENTS LTD.
4 The Green, Richmond, Surrey. 01-940 0030/3629 est. 1034

General Vacancies

THE NATIONAL HOSPITALS COLLEGE OF SPEECH SCIENCES
PORTLAND PLACE, LONDON, W.1
require a

LOCUM LECTURER IN PSYCHOLOGY

(1st October, 1978-31st May, 1979)

Applications are invited from lecturers, clinical or educational psychologists for the above post. The successful candidate will prepare students for the present three year Diploma of the College of Speech Therapists, help coordinate the work of visiting lecturers in psychology, aid in selection procedures and be expected to take an interest in the clinical aspects of the course.

Salary in accordance with Whitley Council Senior Scale. **For further details and application form contact the Personnel Department, National Hospitals for Nervous Diseases, Queen Square, London WC1N 3BG. Tel: 01-837 3611, Ext. 65.**

ASSISTANT SECRETARY

The Council of Engineering Institutions requires an Assistant Secretary for the education and training activities associated with the work of the Engineers Registration Board. These are wide in nature and include matters such as qualifications, examinations, registration and exemption procedures. After a lead-in period covering the department's work in general, the successful candidate showing initiative and appropriate capability will be delegated responsibility for specific activities within the framework of general duties.

Applicants should have experience of committee work, a degree or professional qualifications and be familiar with the role of professional institutions and technical education at all levels. The emoluments are negotiable depending on experience and qualifications.

Written applications, with a full curriculum vitae and availability, should be sent within a month to the Secretary, Council of Engineering Institutions, 2 Little Smith Street, Westminster, London SW1P 3DL, in an envelope marked "Confidential—Assistant Secretary (Education and Training)".

SENIOR ASSISTANT SECRETARY

CEI—ENGINEERS REGISTRATION BOARD

The Council requires a Senior Assistant Secretary who will be primarily concerned with the education, training and registration activities of the Engineers Registration Board. This is a senior appointment calling for initiative and preferably for someone with experience in engineering qualification matters. The duties involve an understanding of the needs of both the public and private sectors of industry for engineers and technicians.

Applicants should have experience of committee work, a degree or professional qualification and be familiar with the role of professional institutions and technical education at all levels. The post is pensionable and the remuneration negotiable depending on qualifications and experience. It is envisaged that the successful candidate will be now earning no less than £7,000.00 per annum.

Written applications, with a full curriculum vitae and availability, should be sent within a month to the Secretary, Council of Engineering Institutions, 2 Little Smith Street, Westminster, London SW1P 3DL, in an envelope marked "Confidential—Senior Secretary (ERB)".

ANALYST/PROGRAMMER

Salary up to £4,839

We are looking for an analyst/programmer to join the MANAGEMENT LEARNING PROJECT. This project is concerned with encouraging and supporting the use of a new range of computer assisted learning methods for management education.
The successful applicant will be responsible for analysis, programming, user support and technical advice on all aspects of the project. He or she is likely to be interested in the educational application of computing and in the opportunity of a non-executive job as a member of a small team.
It is hoped that the appointment which will last until December 31st, 1979, will be made as soon as possible.

Please write, enclosing curriculum vitae and the names of two referees, to: Richard Boot, Director of Management Learning Project, London Business School, Sussex Place, Regent's Park, London NW1 4SA (from whom further information about the project can be obtained).

N.W.A.F./D.E.O RESEARCH PROJECT into the HOUSING NEEDS of BATTERED WOMEN

Third worker needed in October, 1978, to work with existing team of two researchers
The project, which began in March, '78, is already well under way and the first stage will be almost completed by the time of the appointment. The project is based in Sheffield although there will be a substantial amount of travelling around England and Wales in the second stage of the project.
Candidates should have a good knowledge of housing and/or local government as well as knowledge of (though not necessarily experience in Women's Aid. They should also have previous research experience which includes in-depth interviewing and analysis.
Previous applicants may apply.
Salary: £4,400 p.a. (approx.).
For further information contact: N.W.A.F., 51 Chalcot Rd., London, N.W.1.
Closing date Sept 1st.

Overseas

OVERSEAS TEACHING POSTS

LECTOR IN ENGLISH
(Romania)

University of Craiova.

Graduate in English with TEFL experience and preferably TEFL qualification required. Single candidates aged 25-35 preferred. British nationals only.
Salary: 42,000 lei pa tax-free (approx £1,843) paid in 10 monthly instalments, plus sterling subsidy of £2,030 pa tax-free paid in Britain.
Benefits: Free accommodation; overseas allowances. One-year Minor Benefit contract, renewable. 78 UU 99

LECTURER IN ENGLISH LANGUAGE
(Poland)

The Agricultural Academy, Krakow. Candidates should be British Nationals. Essential qualifications are first degree in either English, Modern Languages or Science and three years' TEFL experience. MA or diploma in Applied Linguistics or TEFL desirable.
Salary: 73,800 zlotles pa tax-free. (approx £1,210) plus sterling subsidy of £2,030 pa paid in Britain.
Benefits: Free accommodation; free medical treatment; internal travel reductions; overseas allowances. One-year Minor Benefit contract, renewable. 78 UU 98

LECTURER/SUPERVISOR
(Ecuador)

British Institute, Quito. Tenable November, 1978.
Qualifications: Degree with postgraduate TEFL qualification and at lenst five years' TEFL experience. MA in Applied Linguistics, teacher training experience and knowledge of Spanish desirable.
Salary: £5,681-£7,707 pa.
Benefits: Overseas and children's allowances; free furnished accommodation; medical scheme; employer's share of superannuation contribution. Two-year Sub-Formula contract, renewable. 78 PO 165

CONSULTANT
(Indonesia)

Technical English Upgrading Programme, Directorate of Vocational and Technical Education, Jakarta.
Duties will involve needs analysis, teacher training and writing ESP materials.
Qualifications: Degree, MA in Applied Linguistics or one-year postgraduate diploma in TEFL and five years' experience in TEFL, ESP and teacher training.
Salary: £5,681-£7,707+10% inducement allowance.
Benefits: Overseas and children's allowances; free accommodation. Two-year KELT contract. 78 PO 164

Return fares are paid; Local contracts are guaranteed by the British Council. Please write briefly stating qualifications and length of appropriate experience, quoting relevant reference number and title of post, for further details and application form to The British Council (Appointments), 65 Davies Street, London W1Y 2AA.

THE BRITISH COUNCIL

THE NEW SOUTH WALES INSTITUTE OF TECHNOLOGY
SYDNEY, AUSTRALIA

FACULTY OF BUSINESS STUDIES

Principal Lecturer in Administration

A$24,825 p.a.

The New South Wales Institute of Technology is a corporate institution established to provide a wide range of professional courses for those entering or already employed in industry, government and technological fields.
Administratively the Faculty of Business Studies is organised into four schools: Business and Public Administration, Accounting, Marketing and Finance and Economics. Student enrolment approximates 2,500.
The Faculty offers a Bachelor of Business degree with concentrations in Operations Management, Public Administration, Accounting, and Marketing. In addition, graduate diplomas in Personnel Management and Industrial Relations, and in Accounting, are offered. A graduate diploma in Administration is to be introduced in 1979. Further, the Faculty is developing a master of business programme for introduction in the future.
The School of Business and Public Administration currently offers undergraduate fields of concentration in Operations Management and in Public Administration. It is intended that a field of concentration in Employment Relations be offered in the future.
Fields of interest in the School of Business and Public Administration include the quantitative, organisational, behavioural and policy/strategy aspects of business and management; public administration; and employment relations.
Applicants must possess qualifications at the post-graduate level in one or more of the fields of interest of the school as outlined above. They should also have teaching experience at an appropriate level in higher education, in the management/administration field and should have substantial practical experience in business, government or consulting.
In addition to lecturing in the under-graduate and post-graduate courses offered by the Faculty, the appointee will provide academic leadership and will be involved in administrative activities associated with the School of Business and Public Administration.
With permission of Council, academic staff are permitted to undertake limited consulting work.
Fares and a contribution toward removal and initial accommodation expenses are provided for overseas appointees. A housing loan scheme is also available.
Applications close on September 8, 1978. Applicants should arrange for three confidential referees' reports to arrive by the same date. Applications should include address; phone number; personal particulars; documentary evidence of qualifications; work and teaching experience; affiliations; publications; research work undertaken and the names and addresses of the referees contacted.
Applications and requests for further information to be sent to:
The Agent-General for New South Wales,
N.S.W. Government Offices,
66 The Strand, London WC2N 5LZ.

General Vacancies continued

LEICESTERSHIRE
(4,418 out

COUNTY
MANPOWER CENTRE
CO-OPERATIVE COLLEGE,
Holyoake House, Loughborough
(Tel. 31 [illegible])

LECTURER IN MANAGEMENT STUDIES

The County Council provides short and long term courses for post-entrant students and all persons in Management and Administrative staff employed by the Co-operative Movement.
The successful candidate will share in the conduct and planning of courses; will be required to undertake appropriate research and participate in attachments designed to develop experience in the co-operative retailing.
Applicants should possess appropriate academic qualifications and experience in retail management will be an advantage.
Salary: Lecturer II, £4,101 to £5,751.
Further particulars from the Principal at the above address.

Classified Advertisements

To advertise in The THES phone Lorraine Williams 01-837 1234 Extn 575

THE TIMES Higher Education SUPPLEMENT

New Printing House Square, P.O. Box 7 Gray's Inn Road, London WC1X 8EZ

36,000 REASONS FOR USING THE T.H.E.S. CLASSIFIED PAGES . . .

A comprehensive survey conducted by NOP Market Research Ltd. shows that an average issue of the THES is read by over 36,000 academics at universities, polytechnics and colleges in Great Britain.
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THE TIMES
Higher Education
SUPPLEMENT

Universities continued

UNIVERSITY OF ZAMBIA

Applications are invited for the post of ASSOCIATE PROFESSOR/SENIOR LECTURER/LECTURER IN GEOGRAPHY in the School of Humanities and Social Sciences. Applicants must possess a good first degree and a postgraduate degree, preferably at doctoral level, and expertise in urban geography, cartography, population geography, economic geography, quantitative techniques, transportation geography, and geomorphology. Salary scales: Associate Professor K8,232-K8,616 pa; Senior Lecturer K7,603-K8,016 pa; Lecturer K4,956-K7,608 pa (£1 sterling = K1.64). The British Government may supplement salary in range £2,922-£5,154 pa (sterling) for married appointee and £930-£2,568 pa (sterling) for single appointee (reviewed annually and normally free of all tax) and provide children's education allowances and holiday visit passages. Family passages; baggage allowance; superannuation; medical aid scheme; regular overseas leave; three-year contract.

Detailed application (two copies) with curriculum vitae and naming three referees to be sent to Registrar, University of Zambia, PO Box 2379, Lusaka, Zambia, by 8 September, 1978. Applicants resident in the UK should send one copy to Inter-University Council, 90/91 Tottenham Court Road, London W1P 0DT. Further details may be obtained from either address.

UNIVERSITY OF ZAMBIA

Applications are invited for the post of SENIOR LECTURER/LECTURER IN PHYSICS in the School of Natural Sciences. Applicants must have a PhD or equivalent. Applicants for Senior positions must have considerable University lecturing experience. Preference will be given to persons interested in Solid State Physics and Geophysics. All appointees will be required to teach undergraduate courses leading to a BSc in two subjects or in Physics. Salary Scales: Senior Lecturer, K7,603-K8,016 p.a. Lecturer, K4,956-K7,608 p.a. (£1 sterling = K1.64). The British Government may supplement salary in range £2,922-£4,356 p.a. (sterling) for married appointee and £930-£1,908 p.a. (sterling) for single appointee (reviewed annually and normally free of all tax) and provide children's education allowances and holiday visit passages. Family passages; baggage allowance; superannuation; medical aid scheme; regular overseas leave; three year contract. Detailed application (2 copies) with curriculum vitae and naming three referees to be sent to Registrar, University of Zambia, P.O. Box 2379, Lusaka, Zambia, by 8th September, 1978. Applicants resident in the UK should send one copy to Inter-University Council, 90/91 Tottenham Court Road, London W1P 0DT. Further details may be obtained from either address.

BATH

THE UNIVERSITY

SCHOOL OF HUMANITIES AND SOCIAL SCIENCES

RESEARCH ASSISTANT

Applications are invited from Graduates with good Honours Degrees in History, for a post as Research Assistant to undertake work on an S.S.R.C. supported project on the census records for Scotland. The successful applicant will be expected to live in or near to Edinburgh.

The appointment will be for one year from 1st October, 1978.

Salary up to £3,660 per annum, according to qualifications and experience.

Application forms and further particulars are available from the Personnel Officer, University of Bath, Bath, BA2 7AY, quoting reference number 78/177/THES. Closing date will be 28th August, 1978.

EXETER

THE UNIVERSITY

RESEARCH FELLOW

Applications are invited from persons holding a higher degree in social administration or an allied subject to work on an evaluation research programme in connexion with "Just the Job". This is an experimental approach to youth employment operated by the National Extension College in association with Yorkshire Television and funded by the Manpower Services Commission.

Tenure of post: one year, commencing as soon as possible.

Salary within a range £3,660 to £4,130 p.a., dependent upon age, experience and qualifications.

Further details available from Professor H. A. B. Leaper, Department of Sociology, Amory Building, Rennes Drive, Exeter, to whom applications should be sent by 25 August, 1978.

GALWAY

UNIVERSITY COLLEGE

JUNIOR LECTURESHIP IN GERMAN

Applications are invited for the above post. Salary scale £3,557 by 10 to £6,075. Closing date for receipt of applications is 18 September, 1978.

Further information may be obtained from the Registrar.

EDINBURGH

HERIOT-WATT UNIVERSITY

CHAIR OF BIOLOGICAL SCIENCES

DEPARTMENT OF BREWING AND BIOLOGICAL SCIENCES

Applications are invited for a newly established Chair in the Department of Brewing and Biological Sciences. Applicants should have research expertise in Microbiology, Marine Biology or a related Biological Science. The average salary for a professorial appointment is £10,419 per annum.

Further particulars and application forms may be obtained by writing to the Staff Officer, Heriot-Watt University, Chambers Street, Edinburgh EH1 1HX. Informal inquiries may also be sent to Professor D. J. Manners at the above Department.

IRAN

THE ENGLISH LANGUAGE CENTER OF ARYA MEHR UNIVERSITY OF TECHNOLOGY

Isfahan, Iran

Is accepting applications for positions as INSTRUCTOR in its programme in English for Science and Technology for this September. Teachers with an M.A. in TEFL or a related field and teaching experience are preferred.

Send resume and request for application materials immediately to Gregory J. Sirick, Director, English Language Center, Arya Mehr University of Technology (Isfahan), P.O. Box 69-54, Isfahan, Iran.

IRAN

ARYA MEHR UNIVERSITY OF TECHNOLOGY

Isfahan, Iran

Is seeking two students to obtain an M.A. in Teaching English as a Foreign Language at the University of Illinois beginning this September. Applicants must have a B.A. in English with high academic standing and high English competence evidenced by 560 or above on the TOEFL and a personal interview.

For further information and application materials contact Dr. Gregory Sirick, Director, English Language Centre, Arya Mehr University of Technology (Isfahan), P.O. Box 69-54, Isfahan, Iran.

IRAN

THE ENGLISH LANGUAGE CENTER OF ARYA MEHR UNIVERSITY OF TECHNOLOGY

Isfahan, Iran

Is seeking an ASSISTANT DIRECTOR for its programme in English for Science and Technology. Applicants with Ph.D. in Applied Linguistics, TEFL or a related field, administrative experience and Persian language ability are preferred.

Send resume and request for application materials immediately to Gregory J. Sirick, Director, English Language Center, Arya Mehr University of Technology (Isfahan), P.O. Box 69-54, Isfahan, Iran.

LIVERPOOL

THE UNIVERSITY

CENTRE FOR LATIN-AMERICAN STUDIES

Applications are invited for the post of RESEARCH FELLOW in LATIN-AMERICAN STUDIES from suitable qualified postgraduates who have undertaken research in Latin America in the fields of history, geography, literature or the social sciences.

The post will be tenable from October 1, 1978 to September 30, 1979, with a possibility of renewal for up to a further two years.

Salary will be within the range £3,660 to £4,130 per annum on a scale rising to £6,170 per annum.

Applications, stating age, qualifications and experience, together with the names of three referees, should be received not later than September 1, 1978, by the Registrar, The University, P.O. Box 147, Liverpool L69 3BX, from whom further particulars may be obtained. Quote Ref.: RV. 880/THES.

LONDON

THE UNIVERSITY

WESTFIELD COLLEGE

MANAGER OF COMPUTER SERVICES

The Computer Unit is equipped with a large dual processor Modular 1 providing local processing as well as serving as a remote batch terminal to the University's CDC computers. The unit collaborates closely with the Department of Computer Science and provides a computing service for the other departments of the College. [illegible] to which provide local services to users. The manager will be responsible for running the unit and its forward planning. The post is regarded as academic, but carries no teaching duties. The appointee will be expected to pursue research.

Salary initially on the scale for University Other Related Staff Grade 3 of £5,054 by £241 to £7,071 by £251 to £7,308 plus £450 London Weighting Allowance.

Applications with the names of two referees should be submitted by 31st August, 1978, to Dr. J. Buckingham, Personnel Officer, Westfield College, Kidderpore Avenue, London, NW3 7ST.

MANCHESTER

THE UNIVERSITY

TEMPORARY LECTURER IN GEOGRAPHY

Applications are invited for this post, tenable initially for one year. Salary range per annum: £3,660 to £4,315. Superannuation.

Particulars and application forms (returnable by August 17th) from the Registrar, The University, Manchester M13 9PL. Quote reference 188/78/THES.

LONDON, W.C.1

SENIOR EXECUTIVE OFFICER required in Registrar's Department to deal with verification of qualifications, determination of Overseas Students' status, liaison with UCCA and various other duties requiring initiative. Graduate preferred. Experience in University work and knowledge of foreign languages desirable. Annual leave four weeks plus two weeks during which the College is closed.

Salary on scale £3,627 to £4,299 plus London Weighting.

Further details from Deputy Registrar, University College London, Gower Street, WC1E 6BT. (Telephone 01-387 7050, ext 276.)

LONDON, W.C.1

UNIVERSITY OF LONDON UNION

SERVICES MANAGER AND DEPUTY TO SENIOR ADMINISTRATOR

Administrative Grade 1A

Applications are invited for this post involved in the running of the bar, shop and other services in the University of London Union Building. The Union building provides for social, cultural, intellectual and recreational student activity on a university and intercollegiate basis. A knowledge of bars, maintenance of premises and allied services is desirable although detailed experience of all aspects is not essential. Flexibility and the ability to get on with students, while at the same time maintaining high standards of efficiency are essential. Excellent working atmosphere.

The post is residential, on a salary scale of £5,101 to £6,170 plus £450 London Weighting; Superannuation Scheme; six weeks' holiday plus usual public holidays.

Further details available from the Personnel Officer, University of London, Senate House, Malet Street, London WC1E 7HU (telephone 01-636 8000, ext 151), to whom applications should be sent by August 25, 1978.

MANCHESTER

THE UNIVERSITY

DEPARTMENT OF PSYCHIATRY

Two RESEARCH ASSISTANTS are required from October 1st 1978, for a three-year investigation into the psychological and social aspects of the care provided for cancer patients. One research worker will interview doctors, nurses, social workers and health visitors concerned with cancer care; the other will develop cost-benefit measures of the care provided. The research will involve collaboration between the Department of Psychiatry and the Department of Social Administration. Preference will be given to sociology, anthropology and economics graduates. Previous experience of research into health studies an advantage. Ample opportunity to work for a higher degree. Starting salaries up to £4,130.

Particulars and application forms (returnable by August 31st) from the Registrar, The University, Manchester M13 9PL. Preliminary inquiries to Dr. Peter Maguire, 061-445 8111, Ext 2612 (Sociologist/Anthropologist) or Professor Gordon Forsyth 061-273 7121 (Economist). Please quote ref.: 186/78/THES.

MANCHESTER

THE UNIVERSITY

EXPERIMENTAL OFFICER, DEPARTMENT OF GEOLOGY

Applications are invited for this post in which the Experimental Officer will be responsible for electron optics in the Department of Geology. Instruments concerned are primarily two electron probe microanalysers, one with energy dispersive analysis, but there will also be some involvement with a transmission e.m. and a small scanning e.m. Work on the electron probes will include maintenance, repair and development, some operation of the instruments, and assistance and training for other operators. Salary in the range £3,660 to £6,170 initially dependent upon qualifications and experience. There is scope for the development of the post to S.E.O. in the future.

Particulars and application forms (returnable by August 31) from the Registrar, The University, Manchester M13 9PL. Quote ref. 191/78/THES.

MANCHESTER

THE UNIVERSITY

NEAR EASTERN ARCHAEOLOGY

Applications invited for the following one-year appointments, starting October 1st: (1) Temporary LECTURER. Preference given to candidates with broad archaeological knowledge and/or experience of applying environmental or quantitative techniques in prehistory. Salary range per annum: £3,660 to £7,308. Superannuation. (2) To give part-time teaching assistance. Salary per annum £600.

Particulars and application forms for either appointment (returnable by August 18th) from the Registrar, The University, Manchester M13 9PL. Quote reference 197/78/THES.

READING

THE UNIVERSITY

LECTURESHIPS IN MUSIC

Applications are invited for two LECTURESHIPS in MUSIC. Interests in Renaissance, Mediaeval and 20th-Century Music are especially required, as well as competence in both musical techniques. Performance abilities would be an asset.

The appointments will be from 1 January, 1979, or earlier if possible.

Further information may be obtained from the Registrar (Room 214, Whiteknights House), The University, Whiteknights, Reading RG6 2AH, by whom applications should be received not later than 30 September, 1978.

NEWCASTLE UPON TYNE

THE UNIVERSITY

DEPARTMENT OF STATISTICS

POST-DOCTORAL RESEARCH ASSOCIATE

Applications are invited for a Post-Doctoral RESEARCH ASSOCIATE to work on the statistical analysis of categorical data. The investigation is supported by S.R.C. Preference will be given to statisticians with previous knowledge of the field, and experience in computing would be an additional advantage. The appointment would be tenable for one year starting on 1st October, 1978.

Salary will be at the range of £4,150 to £4,601 per annum, according to age and experience.

Applicants should submit a curriculum vitae and the names of two referees by 31st August, 1978. Applications should be sent to Professor R. L. Plackett, Department of Statistics, The University, Newcastle upon Tyne NE1 7RU.

NEW ZEALAND

UNIVERSITY OF OTAGO

Dunedin

ASSISTANT LECTURER IN HISTORY

Applications are invited for the position of Assistant Lecturer in the History Department.

Applicants should possess an honours degree or postgraduate degree in History. Preference will be given to candidates with special qualifications in Early Modern European/British History. Ability to teach some areas of New Zealand History or Medieval or Modern European British History would be an additional advantage.

Salary Scale NZ$7,632 to $9,449 per annum.

Further particulars are available from the Association of Commonwealth Universities (Appts.), 36 Gordon Square, London WC1H 0PF, or from the Registrar of the University, P.O. Box 56, Dunedin.

Applications close on September 15, 1978.

THE OPEN UNIVERSITY

FACULTY OF MATHEMATICS

PROFESSOR OF STATISTICS

Applications for this Chair are invited from candidates with proven ability for both teaching and research in Statistics. The successful applicant will be expected to provide leadership in the area of statistics and to take a major part in the planning and design of courses involving teaching statistical principles and techniques to a wide variety of student audiences.

The University is currently seeking to extend its research activities so that the active prosecution of both personal and collaborative research will form an important part of the professor's duties. In particular, the person appointed will be expected to encourage and stimulate the application of statistical techniques to a variety of research problems of concern to staff in the University.

Salary: Within the UGC approved professorial range, minimum £10,000 plus membership of the Universities Superannuation Scheme (USS).

Further particulars are available, by postcard request please, from the Recruitment Office (MB/750), The Open University, P.O. Box 75, Walton Hall, Milton Keynes, MK7 6AL, or by telephone from Milton Keynes 63868. There is a 24-hour answering service on 63868.

Closing date for applications: 11th September, 1978.

THE OPEN UNIVERSITY

FACULTY OF EDUCATIONAL STUDIES

ONE-YEAR TEMPORARY RESEARCH ASSISTANTSHIP IN THE INFORMATION RESEARCH GROUP

Applications are invited for the above post, based at the University's headquarters at Milton Keynes.

In collaboration with the Information Officer of the Open University Centre for International Cooperation and Services (O.U.C.I.C.S.), the faculty's Information Research Group is carrying out a preliminary study to provide information to guide the planning of specialised information services for those engaged in distance education. The Research Assistant will be involved in survey and analysis of sources of information relevant to distance education.

The post would be suitable for someone with a social science or education degree, and a qualification in information science or librarianship, who might be interested in a career in some aspect of information work. It is hoped to make an appointment from 1st October 1978 or as soon as possible thereafter.

The salary will be on one of the bottom three points of the 1B scale, Research and Analogous Staff (i.e. £3,160 to £3,660, under review from 1st October 1978).

Application forms and further particulars are available by postcard request from the Recruitment Office (MB/757), The Open University, P.O. Box 75, Walton Hall, Milton Keynes, MK7 6AL, or by telephone from Milton Keynes 63868 (24-hour answering service).

Closing date for applications: 4th September, 1978.

SUSSEX

NEW ENGLAND COLLEGE

BRITISH CAMPUS

Torlington Park, Arundel

New England College, a branch of an American university offering a B.A. degree, seeks part-time LECTURER(S) to teach MODERN DANCE and supervise PHYSICAL EDUCATION.

Please send curriculum vitae to the Director at Torlington Park, Arundel, Sussex BN18 0DA.

READING

THE UNIVERSITY

LECTURESHIP IN PHYSIOLOGY AND BIOCHEMISTRY

Applications are invited for a LECTURESHIP in PHYSIOLOGY. Candidates should have a degree in physiology or related subjects, with a research interest in some area of vertebrate physiology.

The appointment will be in the Lecturer salary scale but, other things being equal, within the range £3,660 to £5,500 per annum (under review).

The person appointed should take up duties on November 1, 1978, or as soon as possible thereafter.

Further information may be obtained from the Registrar (Room 214, Whiteknights House), The University, Whiteknights, Reading RG6 2AH, by whom applications should be received not later than September 18, 1978.

RHODESIA

THE UNIVERSITY

FACULTY OF SCIENCE

Applications are invited for appointment as LECTURER or SENIOR LECTURER in:

AGRICULTURE: The present Department of Agriculture in which the vacancies have arisen is shortly to be reconstituted and expanded into a School of Agriculture.

AGRICULTURAL ECONOMICS: The successful applicant will be required to teach Honours courses in Production Economics and Farm Business Management. Expertise in agricultural systems analysis will be a recommendation.

SOIL SCIENCE: Applicants should be competent to teach either Soil Chemistry or Soil Physics to Honours standard and will be expected to conduct research in one of these fields.

ANIMAL HEALTH: Applications are invited from veterinarians, or animal scientists with suitable qualifications, to teach courses in Animal Health and the Anatomy and Physiology of Farm Animals, the latter at an introductory level.

In making these appointments, preference will be given to candidates who have African or LDC experience.

BIOCHEMISTRY: Candidates for the post in this Department should have a First Degree and a Higher Degree in Biochemistry. The successful candidate will be required to teach Biochemistry to General and Honours Students, to Students of Medicine and Pharmacy and to carry out research.

COMPUTING SCIENCE: (Two posts in this Department): For one post the applicants should have an interest in statistical methods and for the other an interest in data structures and commercial computing. Both appointees will be expected to teach at undergraduate level and to participate in research in the department.

Salary scales (approx. sterling equivalents): Lecturer Grade II £4,331 to £6,791; Lecturer Grade I £7,021 to £8,077; Senior Lecturer £7,710 to £10,155.

Appointment may be on permanent, pensionable terms or for a fixed term of not less than one year.

Further particulars and application procedure obtainable from the Association of Commonwealth Universities (Appts.), 36 Gordon Square, London WC1H 0PF.

Closing date for receipt of applications, August 31, 1978.

British subjects considering applying for posts in Rhodesia are asked to consult the Foreign and Commonwealth Office (telephone 233 4114) or their nearest British Consular Office.

ST. ANDREWS

THE UNIVERSITY

PSYCHOLOGICAL LABORATORY

Applications are invited from GRADUATES with a good Honours Degree in Psychology for a post of RESEARCH ASSISTANT to work on a project concerned with cognitive development in children from 3-6 years old.

The appointment will be for one year in the first instance (with a probable extension for a second year). Salary within range £3,160 to £3,660 plus U.S.S.

Applications including a curriculum vitae and the names of three referees, should be submitted by 31st August, 1978, to Doctor John McShane, Psychological Laboratory, University of St. Andrews, St. Andrews, Fife, from whom further particulars may be obtained.

SURREY

THE UNIVERSITY

RESEARCH FELLOW—DISTRICT NURSE EDUCATION

The Department of Adult Education of the University of Surrey is implementing the new curriculum outlined in the "Education and Training of District Nurses SRN/RGN 1979". Applications are invited for a 30-month full-time appointment of Research Fellow financed by the Department of Health and Social Security. The post would be suitable for a graduate in nursing, education or the behavioural sciences or a district nurse tutor. The Research Fellow will be expected to assist and consult the research team in undertaking assessment of the new course and developing general assessment criteria which could be utilized nationally for District Nurse education.

The person appointed (male or female) may be eligible to register for a higher degree with the University.

Salary scale and conditions of service are those for Research and Analogous Staff in Universities and the starting salary will be on a scale £4,597 to £6,178 per annum, depending upon age, qualifications and experience. The appointment is subject to a satisfactory medical examination.

Further details and an application form may be obtained from the Assistant Secretary (Personnel), University of Surrey, Guildford, Surrey GU2 5XH, to be returned not later than Friday, 25th August, 1978.

STIRLING

THE UNIVERSITY

SECOND CHAIR IN ACCOUNTANCY

Applications are sought from suitably qualified candidates for a Second Chair in Accountancy in the Department of Accountancy and Business Law (present Head of the Department, Professor J. R. E. Bisk).

It is expected that the person appointed will have a special interest in one or more of the following fields: financial accounting including corporate accountancy; auditing; taxation; finance and investment; management accountancy including financial management; corporate planning; national accounting; public sector accounting.

It is hoped that the successful applicant will be in post on or before 1 September 1979 at the latest.

Further particulars are available from the University Secretary (THES), University of Stirling, Stirling FK9 4LA, Scotland, to whom applications should be sent before October 31, 1978.

SOUTHAMPTON

THE UNIVERSITY

DEPARTMENT OF BIOLOGY

Applications are invited from Graduates or other suitably qualified persons for the post of ADMINISTRATOR. The duties of the appointment will be wide ranging and include procedures for financial control, control student admissions and timetabling.

Salary on scale (1A) £3,183 to £6,178 or for an exceptionally experienced candidate in the lower part of the salary scale £5,654 to £7,308. Both scales are under review.

Further particulars of the appointment may be obtained from Mr. A. J. Small, University of Southampton, to whom applications (two copies) in the form of a curriculum vitae and giving the names and addresses of two referees, should be returned by 2nd September, 1978. Please quote Reference 78/115.

ST. ANDREWS

THE UNIVERSITY

DEPARTMENT OF PSYCHOLOGY

Applications are invited for a post of RESEARCH FELLOW for a two-year investigation into grammatical deficits in verbal communication in Down's Syndrome. A sound knowledge of functional approaches to grammatical structure is required, together with the ability to transcribe and analyse speech and to use video recording techniques to monitor conversational behaviour.

Starting salary in the range £3,660 to £4,130, plus USS.

Applications, including a curriculum vitae and the names of two referees, should be sent by 1st September, 1978, to Professor M. A. Jeeves, Department of Psychology, The University, St. Andrews KY16 9AL, from whom further particulars may be obtained.

WALES

THE UNIVERSITY

UNIVERSITY COLLEGE OF SWANSEA

LECTURER

Applications are invited for the vacancy of LECTURER in DRAMA in the DEPARTMENT of ENGLISH LANGUAGE AND LITERATURE. Applicants should be Graduates of a university department of Drama or English, with postgraduate qualifications in Theatre Arts (e.g. in production, stage management, lighting, voice or movement).

The appointment, which will date from 1st October 1978, will be made on the Lecturer's scale up to £4,601 per annum, together with U.S.S./U.S.D.P.S. benefits.

Closing date for applications: Friday, 25th August 1978.

TEMPORARY LECTURER

Applications are invited for the vacancy of temporary LECTURER in the DEPARTMENT of ENGLISH LANGUAGE AND LITERATURE. Candidates should have a good first degree in English and postgraduate research experience, preferably in the field of Contemporary English Literature, i.e. 1930 to date.

The appointment, which will be for one year from 1st October 1978, will be made on the Lecturer's scale up to £4,601 per annum, together with U.S.S./U.S.D.P.S. benefits.

Closing date for applications: Friday, 25th August 1978.

Further particulars of the posts and application forms (two copies) may be obtained from the Personnel Officer, University College of Swansea, Singleton Park, Swansea, SA2 8PP, to whom they should be returned by Friday, 25th August 1978.

HERIOT-WATT UNIVERSITY

DEPARTMENT OF ACCOUNTANCY AND FINANCE

LECTURER IN FINANCIAL AND BANKING STUDIES

Applications are invited for the position of Lecturer in Banking and Financial Studies. Applicants should preferably be Graduates with a recognised professional qualification but graduates with appropriate experience will be considered.

The salary will be on the Lecturer scale £3,660 to £7,308—subject to revision from 1st October 1978.

Further particulars and application forms are available from the Staff Officer, Heriot-Watt University, Chambers Street, Edinburgh.

Holidays and Accommodation

CANADIAN LECTURER at the University of London (Bedford College) urgently requires from August 10, a £200 p.c.m. furnished flat for 3 people (2 adults, 1 child) for 1 year. Near a Tube station or bus line. Contact M. Trudel on 373 4468 (after 6 p.m.) or write 8 Bolton Gardens, London, S.W.5.

Fellowships and Studentships continued

MIDDLESEX

BRUNEL UNIVERSITY

DEPARTMENT OF GOVERNMENT

S.S.R.C. LINKED STUDENTSHIP

(EDUCATIONAL STUDIES UNIT)

Applications are invited from GRADUATES in a Social Science subject or education with a first or upper second-class degree for an S.S.R.C. Linked Studentship associated with the work of the Educational Studies Unit (Director: Professor Maurice Kogan). The Unit's field of interest includes inter-institutional relationships (especially secondary school/agency relationships); ethnic minorities in secondary schools; pupils' and teachers' perspectives on disruption, truancy and other forms of pupil disaffection from secondary schooling.

Application forms and further details from Mrs. S. A. Harris, Department of Government, Brunel University, Uxbridge, Middlesex.

Closing date: Friday, 1st September, 1978.

WARWICK

THE UNIVERSITY

RESEARCH FELLOWSHIP IN PHYSICS

Applications are invited from GRADUATES with research experience in materials science, physics, or related subjects for research on the structure and properties of grain-boundaries in ceramic materials. The project is supported by a Science Research Council grant, awarded to Dr. M. H. Lewis, and will use high resolution electron-microscopy, X-ray microanalysis and Auger electron spectroscopy to correlate crystal-interface structure and mechanisms for plasticity or fracture. Applicants should, preferably, have had experience in using electron-optical techniques. The appointment is for three years from October 1, 1978, or as soon as possible thereafter.

Starting salary up to £4,130 per annum on the Range 1A scale: £3,660 to £6,178 per annum, plus U.S.S. benefits.

Application should be made in writing (no forms) as soon as possible, giving full details to the Academic Registrar, University of Warwick, Coventry CV4 7AL. Please quote ref. no. 1/3A/78.

UNIVERSITY OF STRATHCLYDE

SSRC Research-Linked Studentship in Computing and Politics

The SSRC is prepared to offer a two-year postgraduate studentship for MSc/PhD. The award is linked to SSRC research on Voting and Elections, directed by Dr. W. L. Miller. The student would be required to develop new computer methods to analyse electoral data or apply existing methods in a novel way.

Applicants should have graduate or postgraduate qualifications in Computing, Politics, Econometrics, or Statistics or other relevant subjects.

Please write for further details and application form to the Departmental Secretary, Department of Politics, McCance Building, Strathclyde University, Glasgow G1 1XQ.

LONDON SE10 9NN

ROYAL NAVAL COLLEGE

Greenwich

RESEARCH STUDENTSHIPS

THE DEPARTMENT OF NUCLEAR SCIENCE AND TECHNOLOGY

Applications are invited for a research studentship to study for the degree of M.Phil. (C.N.A.A.) or Ph.D. (C.N.A.A.) at the Royal Naval College. The research field is the study of neutron damage fluences in reactor materials for which excellent laboratory and computer facilities are available.

Candidates must be British nationals and should either hold, or expect to receive, a first or second class honours degree in a relevant field. Appointment will be for a period of three years. The remuneration will be equivalent to that of a S.R.C. postgraduate studentship (London).

Requests for further details and an application form should be made to the Secretary, Royal Naval College, Greenwich, London SE10 9NN.

Completed application forms should be returned by September 18, 1978.

Polytechnics

THE POLYTECHNIC HUDDERSFIELD

DEPARTMENT OF MUSIC

Ref: ACA/219/B

Head of Department (Grade VI)

Salary £9,345-£10,305

(Re-advertisement—previous applicants need not re-apply)

We are seeking candidates with high academic qualifications to take responsibility for this major department in the Polytechnic who will provide leadership in course development and research.

Ideally candidates will be nationally recognised musicians as performance and concerts are an integral part of the Department's courses which include both a Graduate Diploma and an Honours Degree in Music. Future planned developments include an M.A. in Music and a Music option in the B.A. Humanities course.

Further details and application forms, which should be returned by 25 August 1978 from the Establishment Office, The Polytechnic, Queensgate, Huddersfield. (Telephone 0484 22288, extension 2226).

PLYMOUTH POLYTECHNIC

[illegible] OF ENGINEERING SCIENCE

RESEARCH ASSISTANTS

[illegible] of the following areas of study:

The Behaviour of Road [illegible]

[illegible] on Sea Walls.

Composite Materials and [illegible]

The post demands a good first degree or equivalent in civil or mechanical engineering, physics, materials science or mathematics.

Research Assistants are normally required to register for a higher degree, although post doctoral applicants will be considered.

Appointments are for a period of two years with a possibility of a third year (fixed term contracts). Salary will be £3,192 for post-graduates or £3,468 post-doctoral (or equivalent) with annual increments of £138.

Application forms to be returned by Friday 25th August, 1978, can be obtained with further particulars from the Personnel Officer, Plymouth Polytechnic, Drake Circus, Plymouth PL4 8AA.

PLYMOUTH POLYTECHNIC DRAKE CIRCUS PLYMOUTH PL4 8AA

LONDON, S.E.1

THE POLYTECHNIC

RESEARCH ASSISTANT

DEPARTMENT OF ARCHITECTURE HISTORY AND THEORY

This is a two year appointment to undertake research into Victorian speculative housing in London and applicants should have a good honours degree, or equivalent qualification in architecture, history of architecture or a related discipline.

Salary scale £3,015 by £87 (2) to £3,189 including London Allowance.

Application forms from Staffing Officer, Polytechnic of the South Bank, Borough Road, London SE1 0AA. Tel: 01-928 8989.

KINGSTON

THE POLYTECHNIC

SCHOOL OF SOCIOLOGY

RESEARCH ASSISTANT

Required for a project supervised by Dr. J. R. East and Dr. R. A. Towers. The work is concerned with attitude measurement and advertising in the field of preventive medicine. Applicants should have a sound understanding of research procedure and statistical analysis and have good qualifications in psychology, or one of the social or biological sciences.

Salary range £2,673-£2,835 inclusive.

Application forms and further details from Academic Registry, Dept. AO, Kingston Polytechnic, Penrhyn Road, Kingston upon Thames, KT1 2EE. Tel: 01-549 1366.

LIVERPOOL

THE POLYTECHNIC

DEPARTMENT OF FINE ART

PHOTOGRAPHIC TECHNICIAN

(Grade T1 — T3 max.)

Applicants must be qualified and experienced in photographic darkroom practice especially in relation to the needs of Fine Art students following a B.A. (Hons.) course.

The person appointed will be required to assist with student projects and be responsible for the use and maintenance of darkrooms and equipment.

Salary scale: £2,676-£2,967 plus £313 per annum.

Application forms and further details from the Personnel Office, Liverpool Polytechnic, Richmond House, 1 Rumford Place, Liverpool L3 9RH. Telephone: 051-227 5661, ext. 43.

Please quote reference LP 200.

Closing date is fourteen days from the appearance of this advertisement.

PRESTON

THE POLYTECHNIC

FACULTY OF ART AND DESIGN

Applications are invited for the following appointments:—

SENIOR LECTURER or LECTURER II in INDUSTRIAL DESIGN/PRODUCT DESIGN.

LECTURER II in GRAPHIC DESIGN.

SENIOR LECTURER in FASHION (permanent or temporary one-year appointment).

LECTURER II in FASHION DESIGN.

LECTURER II in FASHION KNITWEAR DESIGN (this post is being readvertised—previous experience in education is not essential).

LECTURER II in EXHIBITION DESIGN (this is a temporary one-year appointment).

Salary scales: Senior Lecturer, £6,051 to £7,065 (bar) to £7,673; Lecturer II, £4,101 to £6,558.

Application forms and further particulars may be obtained from the Chief Administrative Officer (Staffing), Preston Polytechnic, Corporation Street, Preston PR1 2TQ, to whom completed applications should be returned by 2nd September, 1978.

SHEFFIELD CITY

THE POLYTECHNIC

DEPARTMENT OF MATHEMATICS AND STATISTICS

LECTURER II IN MATHEMATICS, STATISTICS FOR BUSINESS APPLICATIONS

Salary scale: £4,101-£6,558.

Applicants should have suitable qualifications and experience in Mathematics, Statistics and/or Operational Research, and an interest and background suitable for teaching these subjects to students in the Faculty of Business and Management. Closing date 8th September, 1978.

DEPARTMENT OF METALLURGY

RESEARCH ASSISTANT

Salary scale: £3,660-£3,895-£4,130.

A research assistant is required to investigate the deposition of alloying elements onto iron powder in a fluidised bed. The project is funded by the Science Research Council.

Applicants should possess an Honours degree in Metallurgy, Chemistry or a related subject, and have at least three years post-graduate research experience in Powder Metallurgy, Hydro-Metallurgy, or Electro-Chemistry. The appointment is for a fixed period of three years.

Requests for an application form in writing only please to the Recruitment Section of the Personnel Department, Sheffield City Polytechnic, (Dept. THES), Halfords House, Fitzalan Square, Sheffield S1 2BB. Completed forms should be returned by 25th August, 1978.

Research Posts

MANCHESTER

MANCHESTER AREA HEALTH AUTHORITY (TEACHING)

SOUTH DISTRICT

CHRISTIE HOSPITAL—UNIVERSITY HOSPITAL OF SOUTH MANCHESTER

DEPARTMENT OF SOCIAL RESEARCH

RESEARCH ASSISTANT

A Research Assistant is required for a two-year period from 1st December, 1978, or as soon as possible thereafter, to assist in a study evaluating methods of health education. Travel to study centres in Lancashire, with occasional overnight stay is necessary and a car owner will be preferred.

Candidates should have a good honours or higher degree in one of the social sciences and an interest in and knowledge of interviewing techniques. The possibility exists to use the study data for a higher degree.

Salary scale: £2,991 to £4,275 per annum, entry point to be determined by qualifications and experience.

Application form and job description are available from the Sector Administrator, Christie Hospital, Wilmslow Road, Manchester 20, to whom completed forms should be returned by 11th September. Please quote reference 70/44.

Anyone wishing to discuss this post informally should telephone Dr P. Hobbs or Mr. D. Haran, on 061-434 7721.

BATH

THE UNIVERSITY

SCHOOL OF HUMANITIES & SOCIAL SCIENCES

RESEARCH ASSISTANT

Applications are invited from graduates with good honours degrees in History, for a post as Research Assistant to undertake work on an S.S.R.C.-supported project on the Census Records for Scotland. The successful applicant will be expected to live in or near to Edinburgh.

This appointment will be for one year from 1st October, 1978.

Salary up to £3,660 per annum, according to qualifications and experience.

Application forms and further particulars are available from the Personnel Officer, University of Bath, Bath BA2 7AY, quoting reference number 78/177/THES. Closing date will be 28th August 1978.

LONDON, S.E.18

THAMES POLYTECHNIC

SCHOOL OF BUSINESS ADMINISTRATION

£3,000 per annum to read for a Research Degree in Marketing.

Applications are invited for the post of RESEARCH ASSISTANT in the Division of Marketing. Applicants will either be graduates or have an equivalent professional qualification, but the precise disciplinary background is immaterial. Candidates must have a keen interest in research and will register for a higher degree of the C.N.A.A. on a topic from among the current interests of the Division. These include (i) International Marketing (ii) Consumer Behaviour (iii) Quantitative Methods and Computer Applications (iv) Marketing Education (v) Marketing of Industrial Consumables. The successful candidate will also undertake limited teaching to both undergraduates and post-experience students.

The post will, initially, be for two years with possible extension for a third.

Salary scale: £3,015 to £3,189 inclusive.

Intending applicants who wish to discuss the matter informally may contact Gerald Hoodhart, Reader in Marketing at the address below (01-854 2030, Ext. 467).

Further particulars and form of application may be obtained from the Staffing Officer, Thames Polytechnic, Wellington Street, London SE18 6PF, to whom completed applications should be returned by August 29, 1978.

WARWICK

THE UNIVERSITY

RESEARCH ASSOCIATE IN SOCIOLOGY

Applications are invited for a RESEARCH ASSOCIATE in the Department of Sociology for three years, for a S.S.R.C. financed study of the division of labour in child health care. Applicants should have a degree in sociology or allied discipline. Preference will be given to those with a knowledge of the sociology of health and illness, and some research experience.

Starting salary up to £4,130 per annum on the Research Range 1A scale, £3,660 to £6,178 per annum, depending on age, qualifications and experience.

Further details and application forms from the Academic Registrar, University of Warwick, Coventry CV4 7AL, quoting ref. no. 1/A/78. Closing date for receipt of applications: August 31, 1978.

SHEFFIELD

THE UNIVERSITY

DEPARTMENT OF CONTROL ENGINEERING

RESEARCH ASSISTANT

COMPUTER CONTROL OF WATER SUPPLY

A Research Assistant is required to join a team working on computer control of water distribution systems. This project is supported by the S.R.C. and will be performed in collaboration with Sheffield City Polytechnic, Department of Electronic and Electrical Engineering, and the South Eastern Division of the Yorkshire Water Authority. The project will be concerned with both the development and practical application of computer algorithms covering simulation, optimisation, modelling and prediction techniques. Candidates should have a good degree in engineering, mathematics or computing. A higher degree or industrial experience would be an advantage. The post is tenable for two years. Initial salary £3,660.

Applications to the Registrar and Secretary, University of Sheffield, Western Bank, Sheffield S10 2TN, by August 29, 1978. Quote ref.: R185/DT.

REMINDER

COPY FOR CLASSIFIED ADVERTISEMENTS IN THE T.H.E.S. SHOULD ARRIVE NOT LATER THAN 10.30 a.m. MONDAY PRECEDING THE DATE OF PUBLICATION

Colleges and Institutes of Higher Education

HARROW COLLEGE OF HIGHER EDUCATION

Northwick Park, Harrow, HA1 3TP

Tel.: 01-864 4411

FACULTY OF SOCIAL SCIENCES

SCHOOL OF BUSINESS AND SOCIAL STUDIES

LECTURER II/SENIOR LECTURER IN BANKING

Required as soon as possible after 11th September, 1978, to join a team of staff concerned with the administration and teaching of Banking courses. The person appointed will be expected to assist in developing the Financial Studies Diploma and to contribute to the teaching of Law and Elements of Banking for the Institute of Bankers' examinations.

Applicants should be Graduates and/or professionally qualified with banking and preferably teaching experience.

Salary scales: Lecturer II, £4,101 to £6,558; Senior Lecturer, £6,051 to £7,065 (bar) plus London Allowance £402.

Application forms and further details are obtainable from the Administrative Office (Ext. 39) to whom forms should be returned within 14 days from the appearance of this advertisement.

DORSET INSTITUTE OF HIGHER EDUCATION

Department of Business and Professional Studies

LECTURER II IN LAW

Applications for a new post are invited from candidates with a particular interest in law relating to banking, able to take responsibility for law teaching on Institute of Bankers Part II Diploma courses. The person appointed would join a team of nine lawyers involved in a variety of degree, HND and professional courses. A graduate with a professional qualification is sought, ideally with a background connected with banking. Ability to assist with Employment Law, Planning Law or EEC Law would be an advantage. Starting date September, 1978, or as soon as possible. Salary in range £4,101-£6,558. Details and application forms (returnable by 31st August, 1978) from the Director (Ref. TH 1100/G), Dorset Institute of Higher Education, Wallisdown, Poole, Dorset, BH12 5BB. Tel. Bournemouth 524111.

Hull College of Higher Education

FACULTY OF COMBINED STUDIES

SCHOOL OF HUMANITIES

Lecturer II/Senior Lecturer in Modern American Literature

The person appointed will be required to join the literature team working in the area of the College's Diploma of Higher Education and BA Combined Studies. Initially, the appointment will involve course development in American Literature for the BA and teaching on the Diploma in English literature of the nineteenth and twentieth centuries.

Application forms and further details may be obtained from the address below, to which completed forms should be returned within 10 days of the appearance of the advertisement.

The Personnel Section
Hull College of Higher Education
Cottingham Road
Hull HU6 7RT
Tel: (0482) 41451

ROEHAMPTON INSTITUTE OF HIGHER EDUCATION

A federation of Digby Stuart, Froebel, Southlands and Whitelands Colleges

Applications are invited for a

TEMPORARY LECTURESHIP IN ENGLISH

(one year)

Applicants should have good qualifications with research experience or publications in either 19th or 20th century literature and be able to teach at degree level.

Salary: Burnham FE Scale (£4,413-£6,870 + London Allowance £402). Appointment from the beginning of the Autumn Term 1978 until 31 August, 1979.

Further details and application forms from: The Academic Registrar, Roehampton Institute of Higher Education, Roehampton Lane, London, SW15 5PJ. Closing date for receipt of applications: Thursday, 31 August, 1978.

Announcements

FEDERATION OF AUSTRALIAN UNIVERSITY STAFF ASSOCIATIONS

WARNING

The Australian Vice-Chancellors' Committee has stated it is in the best interests of Australian universities to have a number of fixed-term appointments.

This Federation, representing the academic staff in Australian universities, warns potential applicants for academic positions against accepting an appointment on a fixed-term contract.

The Federation is opposed (except in isolated cases) to fixed-term contracts because of the contradiction between such appointments and the concept of academic freedom. The positions are usually offered on a three-year basis. Fixed-term appointees cannot initiate and follow through long-term programmes, cannot adequately supervise postgraduate students and may find the necessity of having to find further employment a distraction towards the end of their term.

The Federation is further opposed to the use of fixed-term contracts as a device in lieu of a probationary period of appointment to any tenurable position.

The Federation also believes that inadequate compensation is given to terminating fixed-term appointees (although return fares and removal expenses are usually paid) for their enforced redundancy.

The Federation's policies on fixed-term appointments stem from a genuine desire to maintain the highest standards in Australian universities and to uphold the tradition of academic freedom and tenure. While this notice is designed as a warning it is not intended to dissuade overseas applicants from applying for positions in Australian universities where proper procedures exist.

Further information on the Federation's policies on fixed-term appointments may be had from the undersigned.

L. B. Wallis,
General Secretary,
F.A.U.S.A.,
499 St. Kilda Road, Melbourne, Vic., 3004, Aust.
(Phone (03) 26-1264)

13015

Don's diary

Monday

Bright and sunny at 7 am and the mosquitoes were no trouble last night. They only seem to bother me for the first two weeks of their season. Surprised recently to find that Urban Services Department will exterminate your mosquitoes if sent for. A friend rang them and when the exterminator arrived his first question was "Have they got spotted legs?" Somewhat taken aback my friend could only lamely reply she hadn't noticed!

Not our turn to take the children to school and I can have the car every morning this week. I prefer to walk to work if it is not too hot.

Go first to Morrison Hill Technical Institute where I am made to feel a welcome guest, having used their conference room as an office for the past two weeks. Nevertheless I am clearly an embarrassment and the sooner I move to my own temporary office the better. Secretary shows me a letter explaining that the request to have air-conditioners put in my temporary office will need to go before the appropriate committee which meets only once a year! I don't mind the slight physical discomfort but I do find it difficult to hold my papers down on the desk with all the windows open.

Collect the mail, some of my files, my nameplate (in English and Chinese) and proceed to my temporary office on the first floor of a school near by. Traffic noise with the windows open, but quite comfortable with the fans operating. Suddenly at 11 am a bell rings and all hell breaks loose. It's the morning break. Ten minutes later the bell rings again and the voices stop as if snuffed out.

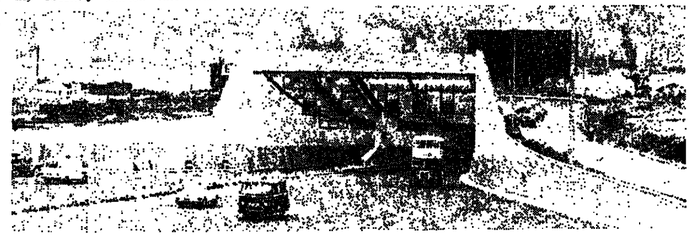
However, this afternoon I have to attend a meeting at the polytechnic to discuss joint policy. This means a cross-harbour tunnel bus trip. Not so picturesque as the Star Ferry but much quicker.

Return home to find wife has been able to purchase tickets for Thursday afternoon at Chinese People's Republic Archaeological exhibit.

Tuesday

Bright and sunny again. Nothing formal today so shirt sleeves and tie. Seminar on objective testing but I cannot look in as I have the whole schedule of proposed courses for Kowloon Tong Technical Institute to consider and amend. Fill in form to claim half day of my leave on Thursday afternoon.

Meeting of the publicity and administrative committee of all the technical institutes of Hong Kong in the afternoon. It is already time to start writing the prospectus for 1979. In the late afternoon I go to my recently started intermediate



The Hongkong Cross Harbour tunnel.

Cantonese class. Discover to my surprise that a few of the class are Chinese and do not know any more Cantonese than I do. Quite strange to see them struggling with tones just like all the Westerners. The locals use the tones so beautifully and easily and always express surprise that we find it difficult to distinguish between the six or seven different tones for one monosyllable, each, of course, with its own meaning.

Wednesday

Bright and sunny again, could become quite hot and summer has not even arrived yet!

Excited call from wife for me to come and look out of the bedroom window. Six large yellow-crested white cockatoos have just descended upon a tree about 60 or 70 feet from our window. They are feeding by stripping long pods which hang from the tree. I have seen these birds two or three times over the last three years and this is the smallest group ever. Sometimes there have been 10 to 12. The guide book says they are escapees who may be breeding. Good luck to them!

Meeting with a senior supplies officer and Education Department staff about the equipment to be ordered for the new technical institute. Receive the full list of initial proposals for the first time. Already deadlines are tight and furniture must be agreed quickly. Fortunately since Hongkong has been completing new technical institutes at an average of one per year recently everyone concerned seems to know what to do.

In afternoon chair a working party on the technical institutes needs in computers. At 6.00 pm go with wife to AGM of the Archaeological Society held in the volunteer officers mess amid the regalia and silver. At the conclusion of the business give a brief talk on recent archaeological work on the kilns on Lantau and Lamma Islands. Afterwards about 20 proceed to a Malaysian restaurant for satays, rice, various curried meats and San Miguel beer at a cost of $12 per head ($8.5 equals £1).

Miss "Match of the Day" (I believe it was West Ham and Derby) because of this, but don't like to see a team fighting to avoid relegation anyway.

Thursday

Bright and sunny again! Deliver a lecture on 80 construction diploma technicians of the Morrison Hill Technical Institute. This is a special lecture based on visits to leisure villages being constructed in New Jersey, USA. The whole concept, which is based on cheap readily available land and prefabrication, is completely different from the usual practices in Hong Kong where land at $1,000-$1,200 per square foot is as expensive as anywhere in the world, and all buildings seem to be in concrete 32 stories high. The price for developments land can be as low as between $2 and $3 per square foot on the islands adjacent to H.K. but even this is high in relation to U.S. and U.K. However, at the end of the lecture all the questions relate to hours of work and wages!

Return to my office by car through the Wanchai market as the only alternative to going round Happy Valley Racecourse again. Follow a taxi. He is more aggressive than I am. No stationary lorries unloading pigs or fish and we get through in short time. Notice that the taxi has been damaged at the rear and carefully restored. The word DATSUN has been very neatly riveted on upside down!

In the afternoon go with wife to the archaeological exhibit. Marvel at the jade suit of the Han princess Tou Wan and at the army of full-size pottery soldiers buried with the Chin emperor, Shih Huang.

Great excitement in the evening because the amah's daughters' pet chicken has laid a first-ever egg. Explain why the shell is thin. Listened to with complete incredulity but half an hour later the amah's daughter is pounding up shells. Realize amah and daughters are city dwellers and have very little connexion with or knowledge of country life.

Friday

Cloudy and raining! Thank goodness, with reservoirs only half full we need rain. Water restrictions were lifted only recently and it is a great pleasure to be able to take baths again. Unless we get a plentiful supply of rain during the usually wet summer season we will be back on restrictions and c... only.

Complete the revision of ... courses for the new institute, prepare to look at the ... lists.

The Cantonese class is lo... but as difficult as ever. ... that if I had put half ... effort into a European lan... would be fluent.

Saturday

My free Saturday and wife ... and daughter plan to visit ... Ching dynasty pottery kiln ... Tai Po. The amah's older ... volunteers to come with ... distance is only 16 miles ... take at least an hour ... through the cross harbour ... $5 each way, and through ... Rock tunnel, $1 each way. ... going through Lion Rock ... make a brief detour and ... the site of Kowloon Tong Tec... Institute to take another ... graph of progress.

We pass Shatin New Town ... the volume of construction ... almost beyond belief. The ... racecourse is being built on ... reclaimed from the sea and ... whole area throbs with the ... tion of new buildings and roads.

We have already spent a ... less Saturday looking for ... site, either because of ... quate Cantonese or bad ... the villagers I spoke to ... know what we were looking ... Having a Cantonese speaking ... ber of the party this time ... decisive and we are able with ... help of the locals to find the ...

The dump of China ... wasters is enormous and soon ... member of the party is scra... about looking for relatively ... or undamaged pots. About ... local children appear and ... showing us where the best ... are. Soon better specimens ... being produced and offered ... at a price.

We decide to retire before ... much damage is done and ... mental note to return if ... when schools are in session ... vessels collected will hopefully ... able us to decide when to ... Return to see a team fighting to avoid relegation anyway.

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The value of in-service training



William Taylor

Many years ago I went after a job in a primary school that had been advertised with the possibility of a special responsibility allowance attached. At preliminary interview I was told that I could not hope for the extra allowance. For was I not already receiving extra pay by virtue of being a graduate?

I thought of this incident when in North America recently I was told that in order not to price themselves out of the market, teachers looking for posts are omitting to mention their possession of master's degrees. There are penalties for claiming qualifications you do not possess. None, apparently, for failing to draw attention to those you really have. Here was an aspect of the effect of educational recession on in-service demand with which I for one had not previously reckoned.

Ever since the James Report it has been the conventional wisdom in this country that more and improved in-service training is a good thing. There are no signs so far of a backlash movement of de-in-service educators. The only clouds that cross the INSET sun are provided by those chief officers who say they cannot find the money to implement the government's wishes, a few heads who complain that the additional teacher absences disrupt their carefully orchestrated timetables, and the desolation of infants when *their* teacher disappears one day a week to attend a course. But these small voices make little impact. In-service education is a good thing. The chorus of agreement is deafening.

And yet . . . . it has to be admitted that we have no very useful evidence as to the effectiveness of in-service education. Not of course that this is any necessary bar to action. There is no strong evidence for a host of things that we do in education. That does not, and should not, stop us from doing them.

But at very least, lack of evidence should make us modest in our claims for what is likely to be achieved, and encourage us to set in train the investigations that might one day enable better informed judgments to be made. Some valuable starts have been made. The Bristol work on evaluating induction schemes is outstanding in this respect, the case-study efforts in other places and a deal of hard nosed but rather fragmentary data from American studies is all suggestive and interesting, but not really adequate as a basis for policy decisions. Much more needs to be done.

Part of the trouble with such research is that there is very little agreement on what constitutes effective teaching. At the CLEA conference in July Mrs Williams commented on the lack of procedures for assessment of teachers' performance in comparison with the civil service, the armed forces and large commercial firms.

Those who are responsible for advising her on these matters will have to tread carefully. Teaching—at any level, from primary school to university—does have certain unique characteristics. Any process of assessment that fails to recognize these is unlikely to have long-term educational benefits. Most ordinary citizens would claim they can tell a good teacher from a bad one; you do not have to be a chef to know when your steak is burned.

But a little reflection soon shows the difficulty of the task. How often is it said "yes, I remember enjoying it at the time, but I can't say he really taught me anything"? Or, "I can't remember much of what he said or did, but he was so keen about it all that he started me off on finding out for myself"? Or "we were old enough to feel so sorry for him struggling out there, that we worked harder and it started to make sense"? Or a dozen other statements in like vein?

We simply do not know how a teacher's classroom performance alters over time, or the extent to which it is influenced by particular school or classroom conditions. It is too easy to assume that in-service education is a cumulative process, that each new exposure to ideas and technique builds upon existing experience.

But the improvement of effectiveness may include unlearning as well as new learning. As people get older and more established, bad habits become increasingly difficult to eradicate. The relative costs of in-service provision may be much greater at some stages of the teaching career than at others. Should priority be given to those longest away from training, or to those more recently qualified?

Another point to be reckoned with is that extended in-service provision may undermine rather than enhance the teacher's sense of mastery and self-confidence. A look in the new secondary shell, or attendance at a course, or listening to a lecture from someone who can spend his time reading, talking and thinking about practice rather than practising, is not necessarily a comfortable experience. For some it can be threatening.

There is much defensive staff room talk about the airy atmospheric woolliness of those who inhabit the upper storeys of ivory towers, and the high salaries and easy lives of those who have escaped the classroom. Some learn to handle the problem of threat and information overload by specialization and applying selective filters; some deny the relevance and usefulness of what they hear; some simply stop listening.

Consultancies and non-didactic methods do not necessarily solve the problem. Those in colleges and universities who are INSET providers must give due weight to teacher sensitivities and anxieties. ... ever unjustified the ... improver may feel these to be.

There are other issues that ... come to the fore as soon as ... new regional bodies propose ... Oakes get into their stride. ... face "relevance" in in-service ... vision is dangerously simple. ... When money is short and pol... pressures for improvement ... great, it is tempting to go for ... seems directly useful in the ... run rather than really beneficial ... the long. Any systematic eva... tion of what really works will ... somehow to reckon with all ... means whereby teachers ... new knowledge and a higher ... of competence. Conferences, ... shops, study groups, school-based ... and school-focused activities, ... regional and national meetings, ... sound broadcasting, travel, ... trial and commercial exchanges, ... sabbatical fellowships and secondments ... in colleges and universities, all these ... can be part of in-service provision.

But a desire for innovation ... visibility of effort must not dist... attention from the importance ... hard talent. If in the early years ... of training a teacher has not learned ... to use and value the literature ... the trade, the most generous ... service provision is unlikely ... compensate.

In a country where only ... a quarter of all teachers have ... the benefit of university or ... level study, it should be a ... time before anyone feels the ... to conceal their qualifications ... day need never come if we ... make the effort to ensure that ... they do possess are really ... having.

The author is director of the ... sity of London Institute of ... tion.

TIMES PAST THE TIMES
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Commonwealth of learning

The twelfth congress of the Associa... of Commonwealth Universities ... opens in Vancouver next ... weekend will be a Jumbo-like ... occasion. On the surface it may ... appear to be a rather cosy and ... almost private meeting, the quin... essence of the low-profile, high-minded mentality of the rather ... genteel British branch of the Anglo-Saxon university tradition, an ... opportunity to renew old acquain... tances and perhaps even a tempo... ary retreat on the shores of the ... Pacific from the cruder and more ... urgent pressures back at home.

But as a more profound level the ... congress is one of the few occasions ... when university leaders can look ... beyond these day-to-day pressures ... which however international ... they are inevitably expressed ... within a particular national context. ... It will be one of the few occasions ... on which the diversity of national, ... cultural and economic backgrounds ... from which the participants come ... can lead to an equally invigorating ... diversity of perspectives on the ... future of the universities, an ... opportunity to discuss together the ... contrast between the developed ... rich and the developing poor worlds ... against a background of shared ... values rather than in a spirit of ... fear or envy. In its own peculiarly ... discreet way the Vancouver con... gress has the potential to become ... a genuine "North South" dialogue ... on university development.

The creative ambiguity is re... flected in the theme of the con... gress which is "reconciling national, ... international and local roles of uni... versities with the essential characte... ter of a university". Few organi... sations are able to bring such a ... wealth of different experiences to ... a consideration of this issue as the ... ACU. Within the Commonwealth ... there are countries with well, even ... lavishly, endowed university systems ... and extremely strong traditions of ... respect for university autonomy; ... there are also countries where be... cause of their comparative poverty ... and the urgent priorities of national ... development less material support ... can be given to universities and ... greater demands must be made of ... them; and there is almost every ... possible variation or combination in ... between to be found somewhere in ... the Commonwealth. Out of this ... variety could come a genuine ad... vance in our understanding of the ... role of the university in the modern ... world.

The ACU is particularly well ... placed to achieve such a new synthesis. International organizations tend to be either too narrow or too wide in their scope. Some like the OECD, or to a greater extent the EEC, are too narrow because the countries which make them up are too similar in their political structures, their stages of economic development, and even their cultural assumptions to be able to generate fresh perspectives on international issues. They achieve agreement by refusing to admit to their exclusive club potentially awkward members who might ask difficult questions. On the other hand organizations such as UNESCO are too diffuse in their membership to produce solutions of practical significance. There is often too little common ground to achieve any kind of creative agreement so nations resort instead to global collective bargaining, eyes down and headphones on, with the help of a colourless international bureaucracy.

The ACU like the Commonwealth itself represents a happy mean. It is sufficiently broad in its membership not to be able to choose the easy way out or to duck the awkward, and important, questions. Yet its member institutions share enough in common to prohibit the growth of an antagonistic mentality within the association. Indeed this community of interest is probably stronger in the ACU than in the Commonwealth. It is not the always fading and often ambivalent memory of a shared "British" past but a continuing commitment to a shared ideal of what a university stands for that binds the members of the ACU together.

Yet it would be wrong to conclude that the ACU is an anodyne or anachronistic body. It can serve as a useful counterweight to the domination of universities by purely national interest. It is bodies such as the ACU, at its five-yearly congresses and in the years between by the technical assistance it gives its member institutions, which inject vitality to the rather jaded rhetoric about the international character of universities. In fact, except for phenomena of dubious value like the hemorrhage of skilled manpower from the developing to the developed world or the continued domination by expatriate elites of some Third World universities, the international character of the university has been eroded and its nationalist commitment intensified over the past generation. In many cases this was inevitable and right. But not always. It is the responsibility of bodies such as the ACU to keep a balance between the duty of the universities to all mankind and to their nation states.

ITV2—by the back door

The main criticism to be levelled at the White Paper on Broadcasting in the vague terms in which it has couched its proposals on both the expansion and financing of the proposed Open Broadcasting Authority to oversee the fourth channel.

The recommendations that the new authority should initially depend on government assistance—this is to continue permanently for educational programmes—and then gain a majority of its revenue from advertising, leaves the OBA open to dual and possibly conflicting pressures.

At the outset, proposals for obtaining revenue from either sponsorship, sport or block advertising, give the OBA in direct competition with the Independent Broadcasting Authority. So does the suggestion that a significant part of the output should be drawn from independent television companies.

Clearly this would not have been commissioned by the IBA. And the White Paper makes it clear that in addition to Government supervision of the fourth channel's output the OBA is to be required to consult with the IBA at practically every step to ensure that the former does not cream off programmes and advertising revenue to the detriment of the latter. It even goes so far as to suggest complementary programming. Perhaps it is right to infer that the fourth channel is after all nothing but an ITV-2 through the "back door".

Undoubtedly the OBA and the fourth channel offer excellent opportunities not only for the Open University which is at last being offered an extension of air-time at peak periods, but for many educational institutions to produce and broadcast materials on a nationwide basis.

But the survival of minority interest programmes which the Government so clearly wants to promote appears to be doubtful from the start. How can we seriously imagine that these programmes will find adequate support from advertising. It is easier to assume that their fate would have been kinder at the hands of the IBA.

Possibly more dangerous are the proposals for the internal reorganization of the BBC under three service management boards overseeing television, radio and external services. This is likely to affect, and not beneficially, areas such as educational broadcasting which has up to now been cohesively and successfully controlled by one management. Now under the Government's plan it will be divided among the Service boards, none of which will see educational broadcasting as their first, or even an urgent priority. So what is gained on the swings of the OBA may be lost on the roundabouts of these secondary proposals.

LETTERS TO THE EDITOR

The role of an FE head of department

Sir,—I was most surprised to find among the normally well reasoned and factually based arguments in your pages what amounted to a diatribe on FE heads of departments by Margaret Davis (*THES*, July 21). The basis of her observations is so subjective and the generalized statements so sweeping that the article takes fallaciousness to a new high.

We are informed that the comments are based on personal observation of three heads of department under British branch of the Anglo-Saxon university tradition, an opportunity to renew old acquaintances and perhaps even a temporary retreat on the shores of the Pacific from the cruder and more urgent pressures back at home.

But as a more profound level the congress is one of the few occasions when university leaders can look beyond these day-to-day pressures which however international they are inevitably expressed within a particular national context. It will be one of the few occasions on which the diversity of national, cultural and economic backgrounds from which the participants come can lead to an equally invigorating diversity of perspectives on the future of the universities, an opportunity to discuss together the contrast between the developed rich and the developing poor worlds against a background of shared values rather than in a spirit of fear or envy. In its own peculiarly discreet way the Vancouver congress has the potential to become a genuine "North South" dialogue on university development.

The creative ambiguity is reflected in the theme of the congress which is "reconciling national, international and local roles of universities with the essential character of a university". Few organisations are able to bring such a wealth of different experiences to a consideration of this issue as the ACU. Within the Commonwealth there are countries with well, even lavishly, endowed university systems and extremely strong traditions of respect for university autonomy; there are also countries where because of their comparative poverty and the urgent priorities of national development less material support can be given to universities and greater demands must be made of them; and there is almost every possible variation or combination in between to be found somewhere in the Commonwealth. Out of this variety could come a genuine advance in our understanding of the role of the university in the modern world.

The ACU is particularly well placed to achieve such a new synthesis. International organizations tend to be either too narrow or too wide in their scope. Some like the OECD, or to a greater extent the EEC, are too narrow because the countries which make them up are too similar in their political structures, their stages of economic development, and even their cultural assumptions to be able to generate fresh perspectives on international issues. They achieve agreement by refusing to admit to their exclusive club potentially awkward members who might ask difficult questions. On the other hand organizations such as UNESCO are too diffuse in their membership to produce solutions of practical significance. There is often too little common ground to achieve any kind of creative agreement so nations resort instead to global collective bargaining, eyes down and headphones on, with the help of a colourless international bureaucracy.

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We are informed that the comments are based on personal observation of three heads of department in different establishments. How much greater would have been the credence one could have placed in her summary of the work of a head of department and how much less doubt one would have had in the motives lying behind the writer's inspiration to produce such a piece had she had much longer and wider experience and, in particular, had she herself been a head of department instead of a senior lecturer, who, even in the capacity of a deputy head, which, one gathers, Margaret Davis is not, can only know second-hand the scope of the work involved.

To answer specific points one by one: the writer must have only a very limited knowledge of the work of very small departments and must have been singularly unfortunate in the heads with whom she has worked if they managed to contain their day to the hours between 10 am and 4 pm. My own working day, which is not untypical in the seven establishments with which I have been connected over a period of 17 years in FE, extends from 8.30 am to 5 pm on a "normal" day, which in many weeks occurs all too rarely.

Again, while it may be true that many heads are not specifically trained in counselling, administration or indeed in management prior to taking up appointment, a failing all too common both inside and outside education, anyone appointed to a position of responsibility who is worthy of that appointment will see to it that such training is received at the first available opportunity and then on a continuing basis particularly via the staff training college at Coombe Lodge and elsewhere in other institutions where courses, seminars and opportunities for discussion abound.

It also may be true that some meetings (not only those attended by heads of departments) are non-productive but control of the work of any organization by committee emerging, matrix and the traditional hierarchical systems being of particular interest? Your pages would be better filled by such items contributed by writers with appropriate experience and who are capable of rational, objective and non-emotive argument instead of the fallacious nonsense thrust upon us on this occasion.

Yours faithfully,
RHYS LEWIS,
Head of department of electronic and radio engineering,
Riversdale College of Technology,
Liverpool.

Malaysian student life

Sir,—In his recent Don's Diary, Terry Smith asks, rhetorically, what British students would make of the stringent rules imposed upon their Malaysian counterparts by the 1976 Educational Institutions (Malaysia) Act. This and other comparisons of student life in Malaysia and British universities might reward further consideration. The following observations are based on my experiences in several British universities and of living for a year as a research student in Kolej Kedua (2nd College), one of nine halls of residence on campus at the Universiti Malaya, Kuala Lumpur.

The regulations concerning the activities of Malaysian students conform with the legal and political constraints of contemporary Malaysian society and with the social norms of the Muslim, Malay culture. Demonstrations, sit-ins, obscene or anti-government literature and alcohol are all prohibited, while severe restrictions are enforced upon the Student Union and upon the rights of individuals, notably in the prevention of visitors of opposite sex in student rooms.

While such regulations would be totally unacceptable to British students they are acceptable in the Malaysian context and do not fundamentally undermine the rationale of higher education. If anything, they allow thought and energy to be channelled in more positive, productive and creative directions. It is perhaps significant that in one year at Kolej Kedua I witnessed no evidence of damage to personal or college property.

While in no way proposing a return to a more authoritarian regime, I wonder how many students in modern halls of residence in Britain would genuinely prefer to live within tighter regulations? More, I suspect, than would generally admit it.

Kolej Kedua has much in common with other residential complexes built in the past two decades. With economy at a premium, its design is functional and efficient rather than aesthetically pleasing. However, behind the stark, prefabricated walls, Kolej Kedua has qualities so often lacking in its British contemporaries. Here I found a community of amiable and truly committed students headed together by a strong sense of loyalty to the college and by a set of common objectives, those of dedication to self-improvement in academic work and on the sports field, and of broadening their social experience. There is a mutual respect among students for the ambitions and achievements of their colleagues, and academic, sporting or other achievements are duly recognized.

In Kolej Kedua the Principal and student body have created, in a modern residential block, a sense of identity, unity and tradition of a type which I experienced as an undergraduate at Clare College, Cambridge, as a postgraduate in Needler Hall, one of the more traditional halls of residence in Hull, and have later witnessed within Saint David's University College. Many aspects of the higher education system in Malaysia have been guided by British influence. We may now have lessons to learn from the Malaysian experience, as Terry Smith perhaps implies.

Yours faithfully,
J. CROWTHER,
Lecturer in geography,
Saint David's University College,
Lampeter.

Fircroft's eleventh hour

Sir,—The news that you reported last week on the future of Fircroft is deeply disturbing. If the Fircroft Trustees are really contemplating selling the buildings then we are indeed at the eleventh hour.

Events would be farcical were it not so tragic. The Russell Report greatly commended the work being done by the adult residential colleges. It thought that the number of places was inadequate and too many were in the south. The recommendation for a new Northern college has just come to fruition after five years' effort. Is it going to neatly coincide with the final closure of Fircroft College in the Midlands?

To quote from the report, "It is essential to keep open an alternative route for the adult late-developers, especially those from unpropitious environments, whose perceptions of the possibility of higher education come only in mature life".

Fircroft has been fulfilling this role since 1909. There is absolutely no reason why it should not be re-opened with a reformed open constitution. This is what the Department of Education and Science, the Charity Commissioners, the Old Fircrofters' Guild and almost everyone else is advocating. If the majority of trade union members on the governing body is inimical to the trust deed, the Trustees should without hesitation withdraw the proposal and start again, not sell up. The TUC could help by going gracefully and without rancour.

If the college has ever needed its friends to rally round, this is the time.

Yours truly,
BRIAN N. NICOL,
Press Officer,
Old Fircrofters' Guild.

Letters for publication should arrive by Tuesday morning at the latest. They should be as short as possible, and the editor reserves the right to cut or amend them if necessary.

'Wrongs' at Ibadan

Sir,—The letter titled "Nigerian wrongs" by E. R. Turton (*THES*, May 12) made interesting reading, but the writer was frivolous with his facts.

True there was student unrest from April 17 to May this year against an increase in boarding and catering fees. But the tuition remains free. And let me put in parenthesis that the students' protest was not against non-payment of salaries and other entitlements to university workers as Turton would want one to believe.

The writer accused your paper of not providing up-to-date information concerning the financial crisis facing Nigerian universities and the effect this is having on staff employed by these institutions.

He wrote "At Ibadan University for instance, the payment of salaries to lecturers was delayed by over two months at the beginning of this year due to economy measures. Increments have been stopped and car loans suspended for certain levels of staff even when their contracts specify that it is their entitlement. Car allowances of N600 per annum have just been discontinued, while luggage allowances have been redefined very greatly to the detriment of staff". And he concluded by saying "your paper carries a very substantial number of advertisements for posts in Nigerian universities. I only wish you could also try to provide more useful insight into local conditions there since so much seems to go unreported."

It will indeed be useful if your paper can carry out investigative, analytical and objective reporting of events in Nigerian educational institutions.

For example, the accusations that salary increments were stopped, and that car loans suspended while car allowances were discontinued are erroneous. All those qualified for these entitlements and other remunerations for good work were paid. All these are in addition to free medical facilities and part-furnished accommodation enjoyed by both indigenous and foreign members of the staff of the University of Ibadan.

Turton and other members of staff were not deprived of their salaries, nor punished by an undue delay despite some financial hardships. It is, therefore, not surprising that three British expatriate members of our staff dissociated themselves from his view.

Yours faithfully,
DAPO OLUGE,
Public relations officer,
University of Ibadan,
Nigeria.